

contributions to economic
analysis

S. DELL / Editor



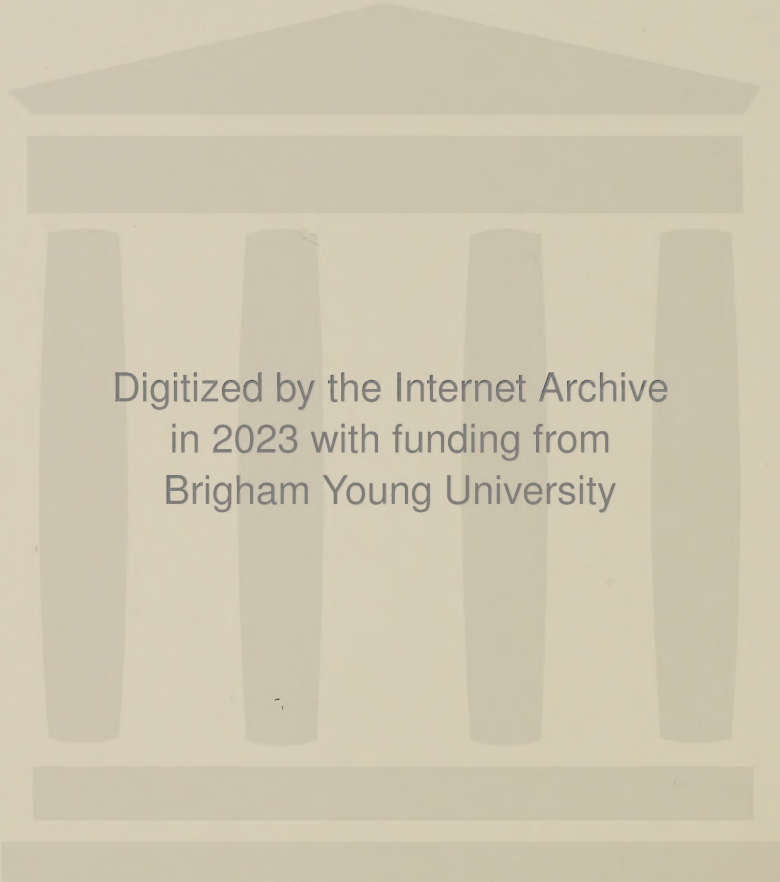
The International Monetary System and its Reform

Part II

North-Holland

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THE INTERNATIONAL MONETARY SYSTEM AND ITS REFORM

Part II

CONTRIBUTIONS TO ECONOMIC ANALYSIS

162

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THE INTERNATIONAL MONETARY SYSTEM AND ITS REFORM

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United Nations project directed by Sidney Dell
1979-1986

Published in cooperation with the United Nations

PART II



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MEASURES TO STRENGTHEN THE SDR

Group of Experts

Letter of Transmittal

2 March 1981

Dear Professor Nwankwo,

On behalf of the Secretary-General of UNCTAD, I have the honour to submit herewith a report on Measures to Strengthen the SDR. The report responds to your request for a study of the measures required to make the SDR the principal reserve asset in the international monetary system in accordance with Article VIII, Section 7 and Article XXII of the IMF Articles of Agreement. Particular attention was to be given to improving the distribution of liquidity, and protecting the interests of low-income countries.

The report was prepared by a group of experts, acting in their personal capacities, with the following membership:

Mr. Ricardo Arriazu, Central Bank of Argentina
 Mr. K.A. Chrystal, University of Essex
 Professor Gerald Helleiner, University of Toronto
 Mr. Jerry Hospedales, Central Bank of Trinidad and Tobago
 Mr. V.B. Kadam, Reserve Bank of India
 Mr. Benito Legarda, Ministry of Finance, Philippines
 Professor John Williamson, Pontifícia Universidade Católica do
 Rio de Janeiro
 Mr. Delisle Worrell, Central Bank of Barbados

Mr. Benito Legarda acted as chairman of the group, which met twice at the United Nations, New York, on December 8-10, 1980 and February 25-27, 1981. Professor Peter B. Kenen of Princeton University participated in the first meeting of the group but was unable to attend the second meeting.

Professor G.O. Nwankwo
 Chairman
 Deputies of the Group of Twenty-Four
 Central Bank of Nigeria
 Lagos
 Nigeria

Supporting papers on various aspects of the problems considered by the group were prepared by Mr. Chrystal, Professor Kenen, Mr. Legarda and Professor Williamson. These papers will be distributed separately to the Group of Twenty-Four.

The report reflects a large measure of agreement among the members of the group, but not all members would necessarily subscribe to every sentence in the report.

The group benefited considerably from technical advice provided at its second meeting by the IMF staff, represented by Mr. Rudolf R. Rhomberg and Mr. Jan-Maarten Zegers. The group was assisted also by Mr. Taher Kanaan, UNCTAD secretariat, Mr. Roger Lawrence, Department of International Economic and Social Affairs, and Mr. Justinian Rweyemamu, Office of the Director-General for Development and International Economic Co-operation.

Yours sincerely,

(signed) Sidney Dell

Sidney Dell
Project Director

I. The origins and development of the SDR

1. The 1960s witnessed growing apprehension about the adequacy of global liquidity. After 1964 reserve growth became much less rapid than in earlier years. The prospect towards the end of the decade was for a further slowdown, with world reserves in relation to trade already 50 per cent below the levels of the early 1950s.

2. These circumstances prompted a search by the IMF for ways to augment liquidity. Acceptance was eventually secured for a new reserve asset that was to derive its essential value from the obligation of participants to accept it, in much the same way as the value of domestic fiduciary money derives its value from its status as legal tender. Accordingly, an amendment to the Articles of Agreement of the IMF, to provide for a "Facility based on Special Drawing Rights in the Fund" was prepared; it became effective on 28 July 1969.

3. On 3 October 1969 the Board of Governors of the Fund accepted a proposal for a total of SDR 9.5 billion to be allocated in instalments at the beginning of 1970, 1971 and 1972 (the first "basic period"). With the explosion of world liquidity (mainly in the form of currencies) and the emergence of floating exchange rates in the early 1970s, it proved impossible to secure the required 85 per cent majority for further allocations.

4. Allocations were resumed in 1979, with SDR 4 billion for each of the years 1979, 1980 and 1981. It was thereby recognized that exclusive reliance on reserve currencies to provide additional liquidity was incompatible with Article VIII, Section 7 and Article XXII of the Fund Agreement, which enshrined the objective of making the SDR the principal reserve asset in the international monetary system.

5. An enhanced role for the SDR was an important part of the scheme of reform considered by the Committee of Twenty. In the Outline of Reform, the Committee envisaged an SDR which was to become "the principal reserve asset", with "the role of gold and currencies being reduced"; the SDR was to "be the numéraire in terms of which par values will be expressed", these par values being "stable but adjustable" within an "effective and symmetrical adjustment process". However, floating rates were recognized as providing a useful technique in particular situations. SDRs were to be managed so that "the volume of global reserves is adequate and is consistent with the proper functioning of the adjustment and settlement system". The yield on the SDR was to be "high enough to make it attractive to acquire and hold, but not as high as to make countries reluctant to use SDRs when in deficit".

6. Unfortunately, it did not prove possible to implement the Outline of Reform, and the Second Amendment of the IMF Articles, which came into force in April 1978, failed to establish a new basis for the international monetary system, relying mainly on collaboration of

members with the Fund to ensure the proper functioning of the system. Faced with this disturbing course of events, the Group of Twenty-Four prepared an Outline for a Programme of Action on International Monetary Reform. The Programme of Action pointed out that "no comprehensive and coherent programme was agreed for bringing about a deliberate process of evolution" and that "the international community [had] failed to achieve its goals in the fields of money, trade and transfer of real resources to developing countries".

7. The Group of Twenty-Four stated its commitment to an "effective, symmetrical and equitable adjustment process" in which the terms for official credits would take account of the nature of balance-of-payments problems and "the level of development of the countries concerned". It stressed the urgency of new SDR allocations, the need for regular annual allocations and "a revision of the criteria, both in terms of variables used and the weights attached to them, for determining the quotas of the membership of the IMF". It also reiterated the urgency of a link between SDR allocation and additional development assistance.

Developments affecting the SDR

8. As originally established, the value of the SDR was defined in terms of a quantity of gold equal to the par value of the United States dollar in effect on 1 July 1944. Under the method followed until 1 July 1974 the exchange rate for the United States dollar in terms of SDRs was equal to its par value in terms of SDRs, while the price of any other currency in terms of SDRs was determined from the SDR-dollar rate and the market rate of that currency in terms of the United States dollars.

9. So long as countries undertook to maintain fixed parities, the SDR could be regarded as the numéraire in terms of which all currencies could be valued. When floating became general, some method of valuing SDRs in terms of currencies had to be devised. The standard basket was adopted as the only option which seemed feasible under the floating-rate system. The basket approach was also employed in determining the rate of interest on SDRs.

10. It has been suggested that the decision to set the original interest rate on the SDR at 1 1/2 per cent per annum "was mainly the result of the strong desire on the part of the United States for a low interest rate on the SDR, in order to minimize competition with the United States dollar as a reserve asset, and the fact that the rate of 1 1/2 per cent was already in effect, having been established in 1961 as the rate that the Fund would pay when it borrowed under the General Arrangements to Borrow". 1/

11. Subsequently, the view gained ground among the Fund Executive Directors that:

"Unless some such approach to the value of the SDR [i.e., uniform

proportionate changes designed to keep its value in line with the strongest major currency] were introduced, or unless agreed provisions were instituted to limit foreign currency holdings, it seems clear that to encourage holdings of SDRs on a scale substantially above that at present might require an increase in the rate of interest on SDRs to a rate close to that on average reserve currency holdings". 2/

12. Since interest rate and capital value could be regarded as two aspects of a single phenomenon - the "effective yield" on the SDR - it seemed logical to find a joint answer to the questions arising on both the interest rate and the valuation of the SDR. 3/ Thus the "standard basket" method of valuation originated in the attempt to devise an approach to the interest rate on the SDR that would give this asset a satisfactory effective yield rather than in any a priori view on valuation as such. 4/

13. These developments, together with the failure of the Committee of Twenty to achieve agreement on measures to control international liquidity, involved a significant evolution in attitudes toward the SDR. The hopes that intergovernmental agreement could establish the SDR as the numéraire and basic reserve asset within a framework of matching rights and obligations could no longer be realized when it became impossible to agree on that framework. The view gained ground that acceptability of the SDR depended on increasing its attractiveness to individual holders. There was in consequence a tendency to seek to endow the SDR with characteristics that would enable it to compete effectively with alternative reserve assets, leading ultimately to discussion of the means of establishing acceptability with the private market.

II. Short-term and long-term strategies

14. In the light of the foregoing developments, a whole set of new issues arises in relation to the SDR. These have to do, on the one hand, with adapting the characteristics of the SDR so as to allow it to function effectively in competition with other forms of reserve holdings; and, on the other hand, with the steps required to increase the share of the "improved" SDR in world reserves.

15. Before turning to these matters, however, it is important to recognize that in designing an SDR for the short and even medium term, one should not lose sight of longer-run objectives. In particular, the steps taken to meet the requirements of the short and medium term should not be such as to create obstacles to international monetary reform in the longer run, as envisaged in the Programme of Action adopted at Belgrade in 1979 by the Finance Ministers of the Group of 77.

16. The Programme of Action points to the need for a "fundamental international monetary reform", the main elements of which should be an

effective, symmetrical and equitable adjustment process and an exchange-rate regime which, while flexible, is capable of promoting adequate stability. In addition,

"Arrangements should be made for the creation of international liquidity through truly collective international action in line with the requirements of an expanding world economy, and the special needs of developing countries, and with such safeguards as would ensure that the total supply and distribution of international liquidity is not unduly influenced by the balance-of-payments position of any country or group of countries. The SDR should become the principal reserve asset of the system.

"The promotion of the net flow of real resources to developing countries should be viewed as an integral element of an effectively functioning system".

The proposals in the following section have been drawn up with a view to consistency with the agreed long-term objectives for a fundamental international reform as set out in the Programme of action.

III. Issues for the short and medium term

17. Significant improvements in the characteristics of SDRs could be brought about in the near future by policy measures relating to the yield, liquidity and distribution of SDRs. 5/ In addition, questions have arisen with regard to the relation of the SDR to private markets.

Valuation of the SDR

18. If the SDR is to be promoted on a long-term basis as the principal reserve asset in the international monetary system, it is important to be sure that any method adopted for the valuation of the SDR does not militate against the attainment of this target. In order to enable the SDR to function satisfactorily it is also desirable to minimize changes in the valuation method.

19. Given the realities of the situation, the room for manoeuvre in regard to valuation is limited in the near future. For the present, it has to be accepted that the SDR will continue to be valued as a "standard basket" of five major currencies. One small modification which has been suggested is to move from the current practice of calculating the value of the SDR as the arithmetic mean of the five component currencies. Instead, it is argued, a better practice would be to use a geometric mean. This improvement would eliminate the need for those periodic revisions of weights that are required to retain the original weighting in circumstances where one currency in the basket has appreciated or depreciated in relation to the others. 6/

20. Greater controversy surrounds the issue of the long-term basis for

SDR valuation. One school of thought has it that the standard basket would remain the preferable valuation method. A second school advocates valuation of the SDR in terms of what has been called an "abstract SDR", its value being determined either in a system of par values, or by the exchange markets. A third school envisages an "abstract SDR" based on a system of par values and with no private holdings of SDRs. In the view of the latter school, private held SDR accounts, if it is thought necessary to introduce them, ought not to undermine the collective international management of reserves. Since commercial banks can in any case deal in SDR-denominated assets, there seems little reason, on this view, why the SDR proper should not be limited to the institutions now authorized to hold it. Since the prospect of a major change is distant, the issue need not be settled at the present time.

The rate of interest on the SDR

21. As mentioned in Section I, the interest rate on SDRs was originally set at 1 1/2 per cent per annum. This rate of interest was felt to be justified by the fact that the SDR, being defined in terms of gold, had characteristics superior to any single national currency. However, subsequent developments in international money and capital markets have allowed official holders to hold assets in a much wider variety of currencies than was the case when SDRs were first created. In these circumstances, it has increasingly been felt that, in order to be attractive, the SDR would need to bear a rate of return equal roughly to that which could be obtained by holding assets denominated in the national currencies that make up the SDR. It has also been argued that market rates of return would allow the SDR mechanism to operate with a lower degree of regulation as regards acceptance obligations, and so forth, than would otherwise be the case.

22. In the light of these considerations, a number of decisions have been taken to increase the rate of interest on SDRs. The most recent was in December 1980 when the Board of Directors of the IMF decided in principle to raise the interest rate on SDRs to the full average of the short-term market rates of the five countries whose currencies make up the SDR basket.

23. It cannot automatically be assumed, however, that the SDR will be as attractive as currency reserves simply because it carries the same rate of return. SDR use is subject to a number of impediments and restrictions that do not exist in the case of national currencies. As will be argued below, these should be removed. If this does not occur, SDRs may need to carry rates of return above market rates in order to be as attractive as currency reserves.

24. Developments with regard to the rate of interest on SDRs have modified some aspects of the benefits accruing to developing countries from a rapid expansion in the role of SDRs. The possibility of significant seigniorage gains to be distributed among countries in proportion to quota share was among the important advantages which the

SDR system was expected to provide. The seigniorage gain to countries per SDR created is equal to the difference between the rate of interest which must be paid on SDRs and the rate of interest which the user country would have to pay when borrowing an equivalent amount in international capital markets. Following the recent decision to move to full market rates, the seigniorage resulting from allocations to industrial countries is close to zero; for developing countries the amounts involved are small but vary with their own creditworthiness, as seen by private capital markets. In effect, developing countries, through use of SDRs, are allowed to borrow at rates of interest obtained by the treasuries of the five major countries whose currencies make up the SDR basket. Although the amount of seigniorage available to developing countries per SDR created has been reduced, the more attractive rate of interest on SDRs will presumably lead to larger volumes of SDR creation than would otherwise occur.

25. A question for consideration is whether mechanisms could be put in place that would allow charges to developing countries to be lowered relative to the rate of interest. One means of doing this would be to agree on a small allocation of SDRs within the overall total allocation designed to finance the gap between total charges and total interest payments.

The liquidity of SDRs

26. The attractiveness of SDRs would be enhanced if they could be disposed of with the same freedom, speed and anonymity available when using other reserve assets. At present, a number of provisions and restrictions on SDR use make transactions in SDRs more cumbersome than transactions in other reserve assets.

27. The removal of the reconstitution provision which was agreed in principle by the Executive Board in December 1980 is a useful step toward removing constraints on SDR use. The new provisions for transfer of SDR ownership by mutual agreement are also helpful in this regard. The awkward provisions that remain are the rules on designation and acceptance, and the requirement that countries declare a balance-of-payments need before using SDRs. The provision regarding balance-of-payments need prevents the use of SDRs in the day-to-day settlement of international transactions. The designation/acceptance rules involve administrative delays in the IMF, while SDR placements are confirmed with the recipient. Both sets of restrictions were motivated by an unwillingness to incur the risk that some member countries might find the SDR inferior to other reserve assets. Presumably, the move to market rates of interest has now reduced that risk to a very low level. The designation/acceptance rules should be loosened and phased out as it becomes clear that they are no longer needed. The provision regarding balance-of-payments need should be abolished immediately.

Private holdings of SDRs

28. There has been some evidence of increasing use of the SDR as a unit of account by the private sector, mainly in the denomination of offshore bank deposits but also in denominating bonds. The recent reduction in the size of the SDR basket and any forthcoming borrowing by the Fund (assuming that it is denominated in SDRs) can be expected to stimulate this tendency. The questions that arise are whether further expansion of the private market in SDR-denominated claims is to be welcomed and encouraged, and whether it would be desirable to include private financial institutions among SDR account holders at the IMF in order to facilitate the transactions role of the SDR and remove the distinction between SDRs and SDR-denominated claims.

29. There is little controversy on the first of these issues. In so far as the SDR provides a useful unit of account, it can be expected that private markets in SDR-denominated claims will continue to evolve without the need for official support. Such evolution can only enhance the role of the SDR and presents no potential dangers. Accordingly it is agreed that no action should be taken by the international community to restrain this tendency. Furthermore, the official sector should be encouraged to participate in this evolution by offering SDR-denominated debt to the private sector, for example, in any forthcoming IMF borrowing and in bond issues by the World Bank and the regional development banks. However, under this system the seigniorage gain will continue to accrue to the basket currency countries.

30. The question of private holdings of SDRs is at this stage much more controversial. Some members of the Group argued that this step was unnecessary and undesirable. They felt that it was unnecessary because an improved SDR clearing mechanism could adequately serve the needs of traders and financiers, with national monetary authorities appearing as residual buyers and sellers, in accordance with their policies on exchange rates. This approach would ensure that the quantity of SDRs created would remain firmly under the control of the IMF and avoid fluctuations in the size of aggregate official SDR reserves as a result of transactions with the private sector.

31. Other members of the Group doubted whether it would be possible for an SDR clearing mechanism limited to the official sector to compete effectively against the existing foreign-exchange markets. Accordingly, they argued that such an approach condemned the SDR to remain an asset of peripheral significance. If, on the other hand, private SDR holdings were permitted, and the IMF were to institute a clearing mechanism, it would become possible and probably attractive for countries to peg their currencies to the SDR and to defend their currency pegs by intervening directly in the SDR. This would permit the SDR to emerge as the central working instrument of the system, to the extent that market participants found this attractive. A danger seen by some in this approach, at least in the absence of far-reaching supplementary agreements limiting domestic credit creation on the part of individual countries, was a lack of control over the volume of international liquidity.

32. The Group of Experts did not find it possible to resolve these controversies, which involve questions of considerable novelty and of fundamental importance, and consequently called for further study of the issues involved.

Distribution among countries

33. SDR allocations have hitherto been distributed among participants in the SDR account in accordance with their quota share. The use of quota shares as the criterion for distribution of new international reserves has always been subject to a number of deficiencies, and it would be desirable to arrive at a different system of distribution.

34. The external positions of a large number of developing countries have been under relentless pressure for the past several years, owing to rapid changes in relative prices in the world economy and recession in the industrial countries. Sharply higher interest costs, resulting primarily from the methods favoured in some industrial countries to combat inflation, have recently added to these pressures. In light of the above and in recognition of the fact that distribution of newly created reserves should bear some relationship to the current need for reserves, it is proposed that during the next basic period, the annual allocations of developing countries other than those in structural surplus should be increased to 150 per cent of their quota share, and the allocations to industrial countries decreased by an equivalent amount. Pending the requisite amendment to the IMF Articles of Agreement, this should be brought about by voluntary action on the part of the industrial countries. The distribution of acceptance obligations should, however, be maintained as if allocations had been made in strict accordance with quota share.

Raising the share of SDRs in world reserves

35. Two avenues exist for increasing the share of SDRs in world reserves: (i) substituting SDRs directly for existing reserves held in the form of currencies (and gold), and (ii) the allocation of new SDRs. The latter method will increase the share of SDRs in reserves only if the rate of increase in SDRs exceeds the rate of increase in total reserves. Only new allocations will tend to change the distribution of reserves.

36. The question of a Substitution Account is not under active consideration at the moment. The proposals considered by the Interim Committee in Hamburg had a number of features on which developing countries had reservations. These included the impact of the proposals on international capital markets; the degree to which participation would, in fact, be voluntary; the implications of the creation of a large volume of SDR-denominated assets for the future of the SDR itself; the effect of substitution on the liquidity of reserve holdings; and the use of Fund gold to ensure the financial viability of the Substitution Account.

37. However, substitution remains the only means for bringing about an absolute reduction in the role of reserve currencies, and scope therefore continues to exist for exercises of this sort. The question therefore arises whether procedures for substitution could be found that would avoid the shortcomings of the past proposals, and that would adequately protect and promote the interests of developing countries. There is merit in the suggestion that in any future discussion of substitution, currencies surrendered to the IMF as part of the substitution procedures should be lent directly to deficit developing countries.

The need for a major expansion of SDR allocations

38. From the end of 1972 to the end of 1979 the share of the SDR in world non-gold reserves fell from 7.8 per cent to 4.6 per cent. There was a further decline to 3.6 per cent at the end of 1980, but SDR holdings at that time were temporarily depressed by payment in SDRs of 25 per cent of the quota increases that went into effect at the beginning of December. If gold is included in reserves at market prices, the decline was from 5.1 per cent at the end of 1972 to 2.1 per cent at mid-year 1980. ^{7/}

39. This trend is contrary to that prescribed in the Articles of Agreement of the IMF, one of the objectives of which is to make the SDR the principal international reserve asset. The decline of the SDR is the result of an expansion of international liquidity during the 1970s based on reserve currency creation and the rise in the price of gold - phenomena which, given the residual role of the SDR as a "supplement" to existing reserve assets, ^{8/} were interpreted as precluding any allocation of SDRs from 1972 to 1978, and as requiring allocations since 1979 to be limited to amounts that are of minor significance in relation to aggregate world reserves.

40. Under the Articles of Agreement allocations of SDRs are to be made in the light of a "long-term global need" for additional reserves, and, as shown earlier, it was precisely the fear of a growing world shortage of reserves that led to the original agreement to create a new international reserve asset, and to make a first allocation in 1970.

41. The situation is, of course, quite different today. For industrial countries and major oil-exporting countries the level of reserves is no longer a significant constraint upon the economy. This is because a multiplicity of external borrowing facilities, official and private, is available to governments and central banks, and these countries are therefore free, within fairly wide limits, to choose what level of reserves they will maintain. A few of the more advanced non-oil developing countries are in a somewhat similar position, though the limits to their freedom of action are substantially narrower than in the first two groups of countries.

42. For the overwhelming majority of non-oil developing countries, on the other hand, the earning and holding of reserves involve relatively greater costs, and they do not normally have ready access to borrowing facilities that would provide them with unconditional reserves. Even if they did have such access, the cost of borrowing is a much greater deterrent than for the countries mentioned above. Thus, reserve stringency continues to be a significant obstacle to economic management in a large majority of non-oil developing countries, frequently resulting in a higher level of precautionary trade and exchange restrictions than would otherwise be necessary.

43. The pressures upon these countries are further aggravated by the failure of the international monetary system to provide adequate recycling facilities for the foreign-exchange savings accumulating in the structural surplus countries. During the 1970s the IMF oil facility made a modest contribution to the recycling process at low conditionality, and the commercial banking system stepped in to fill part of the vacuum created by the inadequacy of other facilities for balance-of-payments support; however, most of the low-income countries benefited little from these arrangements.

44. In the present situation, on the other hand, even the meagre support provided by the IMF oil facility has disappeared, to be replaced by resources provided only under stringent conditions. At the same time, there are fears that the commercial banks may be unable or unwilling to play as prominent a role in the recycling process as in the past, on the grounds of the building-up of country risk through the accumulation of debt, and their own prudential operating ratios.

45. In these circumstances the balance between the conditional and unconditional resources available to non-oil developing countries has shifted in a seriously adverse direction, and governments find themselves increasingly hemmed in by the inadequacy of unconditional resources available to them. The imbalance between conditional and unconditional resources available to non-oil developing countries is all the more difficult to accept in view of the windfall to the developed countries resulting from the rise in the price of gold. Well over two-thirds of world reserve asset gold is already held by countries that have either officially revalued their gold at a market-related price or have acted in a manner consistent with such valuation. 9/

46. Three quarters of the world's gold reserves are held by seven countries - Belgium, the Federal Republic of Germany, France, Italy, the Netherlands, Switzerland and the United States of America. Thus the windfall profits of gold revaluation are concentrated in a very small group of countries: they are estimated at about \$360 billion from 1969 to 1979 for the above seven countries.

47. Because of this relatively high concentration of gold holdings in the industrial countries, developing countries have had to earn a much larger proportion of the increment in their reserves than have the

industrial countries. The unearned increment in the reserves of industrial countries during the 1970s was equivalent, at a gold price of \$400 per ounce, to more than one-half of the total value of their reserves at the end of 1980. The corresponding proportion for non-oil developing countries was about 23 per cent.

48. The fact that developing countries hold a relatively small proportion of the world's gold is not accidental. It reflects the fact that most of them responded to urgings that they not seek conversion of dollar balances into gold during the period of dollar convertibility; that, relying on the stability of the international monetary system, they could not afford to forego the yield obtainable on holdings of reserve currencies; and that following the suspension of dollar convertibility they were prevented by the IMF Articles of Agreement from purchasing gold in the market, since the market price was above the official gold price.

49. Although there is no suggestion that the developed countries deliberately brought about the rise in the price of gold that redounded mainly to their advantage, their predominance in the management of the international monetary system may be said to place upon them a special responsibility for ensuring that any windfall gains associated with major changes in the system are equitably distributed. One way to achieve such an objective would be to agree to a volume and pattern of distribution of SDRs that would go some way towards correcting the imbalance that has arisen between developed and developing countries in regard to the accrual of unearned reserves during the 1970s.

50. If the windfall gain were as large a proportion of the total current reserves of non-oil developing countries as it is of those of the developed countries (i.e., some 54 per cent instead of 23 per cent) it would amount to about \$54 billion instead of \$23 billion. It would seem equitable to take these facts into account in determining the size and distribution of SDR allocations for the next basic period.

51. While some developing countries were holding a higher level of reserves in relation to imports at the end of the 1970s than at the end of the years 1960 and 1970, many others were showing declines. Within the group of non-oil developing countries, the rise in reserves in relation to imports was particularly significant in a number of countries that borrowed extensively in the Eurocurrency market, the increase in reserves being considered necessary as a form of guarantee of creditworthiness to the capital markets.

52. The data for a number of countries in Africa and Asia, on the other hand, showed a considerable deterioration in the ratio of reserves to imports. The deterioration was even greater than such data imply because imports of a number of countries were significantly lower at the end of the 1970s than they would have been if adequate finance had been available.

53. Altogether 30 developing countries, of the 93 for which data are available for the end of 1978, had reserve levels corresponding to two months of current imports or less, and in 12 of these cases holdings were equivalent to one month's imports or less. 10/

54. In the light of the considerations set out in this paper, particularly the limited access to additional borrowing facilities in international markets, the non-oil developing countries need incremental reserves of at least SDR 6 billion per annum (equivalent to approximately 10 per cent of their total non-gold reserve holdings at the end of 1980). It is therefore proposed that the allocation of SDRs during the next basic period should be such as to afford these countries a total amount of at least SDR 6 billion per annum.

55. If allocations were made strictly in proportion to quota for all countries, this would imply total allocations of the order of SDR 25 billion per year. This would permit some increase in the share of SDRs in world reserves, as intended under the Articles of Agreement. Such an amount would be consistent with the normal growth of demand for international liquidity under non-inflationary conditions.

56. If, however, it is felt that the level of total SDR allocations should be less than SDR 25 billion, the incremental reserve needs of non-oil developing countries for at least SDR 6 billion a year could still be accommodated.

57. One possible approach would be for developed countries to place part of their allocations at the disposal of the IMF for distribution to developing countries. This would leave substantial scope for discretion in fixing the level of total allocations. For example, it should be possible to apply the formula proposed earlier in this paper, namely to distribute SDRs to non-oil developing countries in proportion to 150 per cent of their quotas, and adjust the distribution to industrial countries downward accordingly. The latter would imply total allocations of the order of SDR 16 billion.

FOOTNOTES

1. J.J. Polak, Valuation and Rate of Interest of the SDR, IMF Pamphlet Series No. 18, Washington, D.C., 1974, pages 7-8.
2. Reform of the International Monetary System: A Report by the Executive Directors to the Board of Governors, Washington, D.C., 1972, pages 54-55.
3. Polak, op. cit., page 9.
4. Polak, op. cit., page 10.
5. The role of the SDR could be further enhanced through its use as a unit of account, notably in borrowing by the IMF, the World Bank and other multilateral institutions, and in the pricing of commodities and international transport services. For an account of progress already made along these lines, see Joseph Gold, SDRs, Currencies and Gold, IMF Pamphlet No. 33, Washington, D.C., 1980.
6. See D.A. Brodsky: Calculating Effective Exchange Rates - Some Practical Implications, mimeo, 1980; and John Williamson: The Case for a Standard Five-Currency Logarithmic Basket, mimeo, 1981.
7. David A. Brodsky and Gary P. Sampson, "Gold, special drawing rights and developing countries", Trade and Development: An UNCTAD Review, No. 2 (Autumn 1980), page 55.
8. Article XVIII, IMF Articles of Agreement.
9. David A. Brodsky and Gary P. Sampson, loc. cit., page 50, footnote 2.
10. UNCTAD, Handbook of International Trade and Development Statistics, Supplement 1980, Table 5.2.

MEASURES TO STRENGTHEN THE SDR: SUPPORTING PAPERS

Introductory Note

The four papers included in the present document were submitted to the expert group that met on 8-10 December 1980 and 25-27 February 1981 to consider the measures required to make the SDR the principal reserve asset in the international monetary system in accordance with Article VIII, section 7, and Article XXII of the IMF Articles of Agreement. The papers are now made available to the Group of Twenty-Four. The report of the expert group itself has been circulated under the title "Measures to Strengthen the SDR" (UNCTAD/MFD/TA/11).

INTERNATIONAL LIQUIDITY AND THE POSITION OF DEVELOPING COUNTRIES IN THE 1980s

K. Alec Chrystal*

During the 1960s, a major topic of discussion in international fora was the question of international liquidity. It was widely feared that if adequate and rational provision was not made for growth of liquidity there would be serious repercussions for world trade. Competitive devaluations and restrictionism in general would be the order of the day, leading to an inevitable slow-down of real growth. It is from the discussions of these issues that the Special Drawing Rights (SDRs) emerged as the agreed 'solution' to the liquidity problem. The prime movers in these discussions were the industrial countries and there can be little serious doubt that it was their own position that was uppermost in their minds. However, in the last decade, the position of the industrial countries has changed considerably, both with regard to liquidity and as a result of the move to floating exchange rates. Consequently, international liquidity has become a much less urgent issue - if indeed it is seen as an issue at all.

The purpose of the present paper is to argue that for a substantial number of developing countries, international liquidity continues to be a problem. This will not be argued on the basis of their projected deficits as a group (though this makes individual country problems much worse) but rather because of the necessity of exchange rate pegging in these countries. The international liquidity problem has not gone away but has merely shifted its locus from the developed to the developing world. In what follows section I will provide a brief summary of the background. Section II will discuss the position of developing countries vis-à-vis the foreign exchange markets. Section III will outline the present liquidity position of developing countries, and section IV will suggest that the analysis indicates a strong case for a bias towards developing countries in future SDR issues. This case, it should be emphasized, is entirely separate from the notion of the 'Aid Link'.

I. International liquidity: a potted history

In the nineteenth century, and before, international debts were settled either by shipments of bullion or by the use of the major 'colonial' currencies. There was, however, no general concern about the stock of international liquidity per se. Such debates as there were typically considered the reverse, i.e., given the extant bullion stock, what was the correct level for the domestic note issue. Concern for international liquidity is largely a twentieth century phenomenon, which arose out of analysis of the experience of the inter-war period. First

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there were the episodes of hyperinflation in Central Europe, and secondly there was the Great Depression of 1929-1933. In the 1930s, in particular, many countries pursued policies which involved substantial trade restrictions and several examples of competitive devaluations.

It was widely hoped that the post-Second World War period would turn out differently. There was a general belief that international co-operation could produce a more stable environment than trade warfare. It is well known that a key role in designing a new international monetary system fell to Keynes of the United Kingdom and White of the United States. International liquidity now came to the centre of the stage.

"Keynes was very strongly convinced that before the war the world was suffering from a shortage of international liquidity also. At the time of the World Economic Conference in London (1933), which was convened to deal with the great depression, he put forward a scheme for the issue of international 'gold notes'. Later his primary purpose in devising his plan for a 'clearing union' was to secure such increase of liquidity after the war as would facilitate a return to more liberal multilateral commercial policies." (Harrod, 1963, page 206)

Keynes saw clearly what was necessary to build a rational system:

"... We need an instrument of international currency having general acceptability between nations, so that blocked balances and bilateral clearings are unnecessary ... We need an orderly and agreed method of determining the relative exchange values of national currency units, so that unilateral action and competitive exchange depreciation are prevented.

We need a quantum of international currency, which is neither determined in an unpredictable and irrelevant manner ... nor subject to large variations ... but is governed by the actual current requirements of world commerce, and is also capable of deliberate expansion and contraction to offset deflationary and inflationary tendencies in effective world demand ... We need a system possessed of an internal stabilizing mechanism, by which pressure is exercised on any country whose balance of payments with the rest of the world is departing from equilibrium in either direction, so as to prevent movements which must create for its neighbours an equal but opposite balance ...

More generally, we need a means of reassurance to a troubled world, by which any country whose own affairs are conducted with due prudence is relieved of anxiety for causes which are not of its own making, concerning its ability to meet its international liabilities, and which will therefore make unnecessary those methods of restriction and discrimination which countries have adopted hitherto, not on their merits but as measures of self-protection from disruptive outside forces."

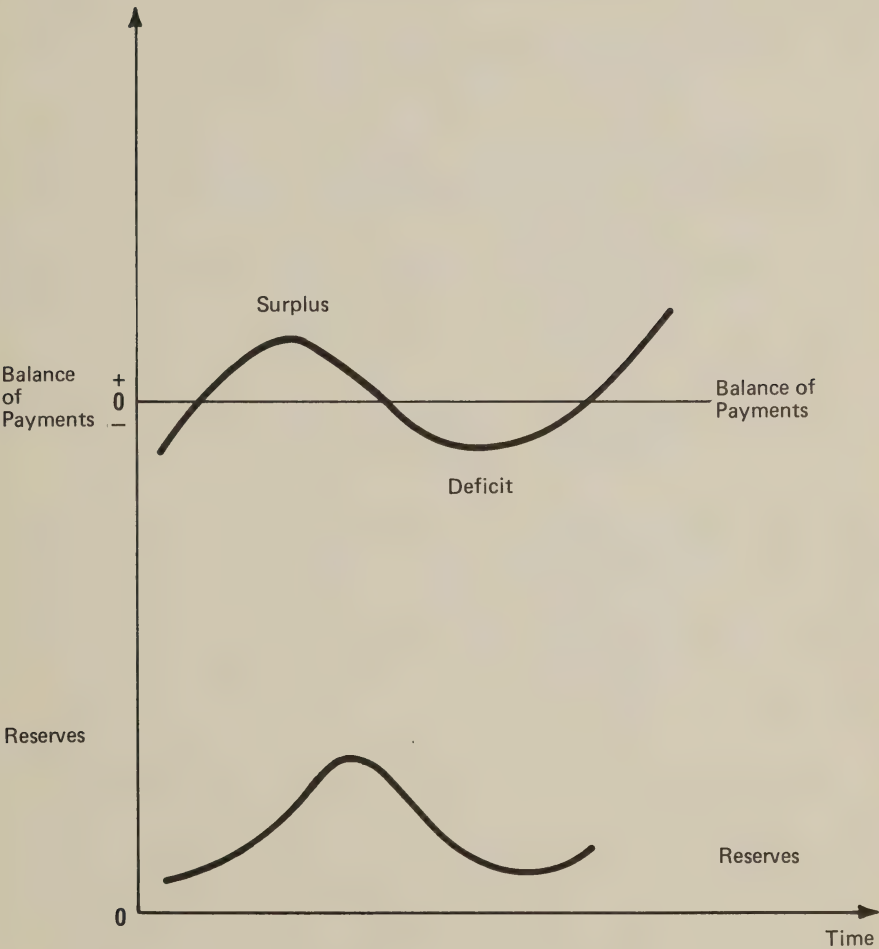
The White plan for a United Nations Stabilization Fund had similar aims. These were:

- "1. To stabilize the foreign exchange rates of the United Nations.
2. To encourage the flow of productive capital among the United Nations.
3. To liberate blocked balances.
4. To help correct the maldistribution of gold among the United Nations.
5. To facilitate the settlement and servicing of international debts - both public and private.
6. To shorten the periods of disturbing disequilibrium in the international accounts of member countries and help stabilize price levels.
7. To reduce the necessity and use of foreign exchange controls.
8. To eliminate multiple currency practices and bilateral clearing arrangements.
9. To promote sound note issuing and credit policies and practices among the United Nations.
10. To reduce barriers to foreign trade.
11. To promote more efficient and less expensive clearings of international exchange transactions." (MF, 1969, page 41)

It should be clear that the Keynes and White plans had similar aims although they were different in substance. However, it is now a matter of history that a conference was held on 1-22 July at the Mount Washington Hotel, Bretton Woods, New Hampshire, United States. Here proposals were drawn up which led to the establishment of the International Monetary Fund (IMF) and what came to be known as the Bretton Woods system. The provision of this system which is of central importance for present purposes is the commitment by all member countries to peg the exchange rates of their various currencies. This commitment could only be met given the availability of adequate liquidity, as Keynes foresaw.

The reason that liquidity was important was that the mechanism of pegging exchange rates required central banks to hold reserves of key currencies (notably dollars) for the purpose of intervening in their own foreign exchange markets as and when their exchange rates deviated from their announced 'par values'. Reserves would, in effect, be a buffer stock which would enable stable exchange rates to be maintained across a trade cycle. The typical pattern might be as in figure 1. During an initial period of surplus the central bank buys dollars to stop the domestic exchange rate from rising. This is followed by a period of deficit during which reserves are run down.

Figure 1
Reserves and Balance of Payments



The liquidity problem may be defined as that of ensuring that central banks as a whole have sufficient reserves at each point in time so that they might reasonably expect to survive normal cycles in the balance of payments without recourse to trade restrictions or devaluations. It was widely anticipated that growing world trade would require growing balances of reserves to maintain any given level of security against running out of reserves. This is because the variance of the balance of payments will increase with the level of payments. Whether this relationship between world trade and reserves should be linear or not has been a matter of some dispute, but need not detain us.

Growth in reserves in the post-war period was provided almost entirely by growing dollar balances. The dangers of this were pointed out in 1961 by Triffin in his book Gold and the Dollar Crisis.

"The gold exchange standard may, but does not necessarily, help in relieving a shortage of world monetary reserves. It does so only to the extent that the key currency countries are willing to let their net reserve position decline through increases in their short-term monetary liabilities unmatched by corresponding increases in their own gross reserves. If they allow this to happen, however, and to continue indefinitely they tend to bring about a collapse of the system itself through the gradual weakening of foreigners' confidence in the key currencies."

The problem was that as dollar liabilities rose relative to United States gold reserves, belief in the convertibility of dollars into gold would become increasingly tenuous. This prognosis gained an important following and it was eventually agreed to introduce a new reserve asset, the SDR. This was intended to become the principal reserve asset of the international monetary system. The initial allocation of SDR 9 billion took place in the three years 1970-1972 and a further allocation of SDR 12 billion has taken place in the period 1970-1981. SDRs were allocated to IMF members in relation to quotas.

The events of 1970-1973, however, completely changed the world monetary environment. Firstly there was a substantial increase in the stock of dollars held by central banks, and secondly there was a switch to floating exchange rates by the major industrial countries. These changes posed serious questions about the relevance of previous concepts of international liquidity. In particular, it was felt - at least initially - that there was an excess of liquidity rather than a shortage. However, matters became more confused as a result of the oil price rise of 1973, which made the distribution of liquidity an issue in addition to the level of world reserves. As a result, the dominant topic of discussion in the mid-1970s was the 'recycling' of OPEC surpluses. In the event the bulk of such 'recycling' was achieved through the money markets with small supplementary assistance from IMF facilities.

By 1978 the OPEC surplus had all but disappeared and a general increase in IMF quotas plus a new allocation of SDRs was deemed

appropriate to catch up with the inflation of the previous decade. The period 1979-1980 also saw another major rise in the price of oil, which appears to be causing particular adjustment problems for the developing world. However, this specific problem is not of central concern here. Rather, the concern is with the 'normal' position of developing countries and in particular with the choices they face for managing their foreign exchange markets.

II. Foreign exchange markets in developing countries

The period since 1973 has been heralded as a period of floating exchange rates. However, as table 1 indicates, this statement requires considerable modification. At the latest count there were 93 countries pegging their currencies to either identifiable currencies or currency baskets. Even of those not so classified, the majority have exchange rates that are pegged on some basis, i.e., to an unknown basket or to a 'crawling' peg. Only the exchange rates of the currencies of the major industrial countries are determined dominantly by or in the money markets. Even here major currencies are linked together through the EMS

Table 1

Exchange rate arrangements of IMF countries

	Number of countries	
	30 June 1975	30 September 1980
Exchange rate pegged to:		
United States dollar	54	40
French franc	13	13
Pound sterling	10	1
Spanish peseta	1	1
South African rand	3	2
SDR	5	15
Other basket	14	21
Joint floating (Snake/EMS):	7	8
Floating or other intervention formula:	18	38
	<u>122</u>	<u>139</u>

Source: IMF, Annual Report 1975, IMF Survey, 10 November 1980.

and all other floats are at best dirty. Nevertheless, there is a clear difference between the exchange markets of the industrial countries and those of the developing countries. This difference does not arise because of a conscious choice by developing nations to spurn the

floating option. Rather it arises from structural considerations which make floating, in effect, a non-option.

One argument as to why floating may be an inappropriate method of balance-of-payments adjustment for developing countries is based on the fact (or fiction) that exchange rate changes do nothing for their terms of trade. If exports are primarily homogeneous commodities and the country is a small buyer in its import markets, then it will take as given the foreign currency prices of both its imports and its exports. Downward adjustments of the exchange rate will raise the domestic relative prices of both imports and exports, so they will tend to produce expenditure switches from imports to domestic goods. However, there will be no increase in exports since the foreign currency price is fixed and there has been increased domestic absorption. Any balance-of-payments improvement has, therefore, been (probably) temporary and certainly at the cost of higher domestic inflation. A more appropriate method of adjustment may be to affect domestic absorption directly or, as is more often the case, to use a combination of tariffs and/or quotas. While this argument may have some merits, its strength will vary from case to case.

A second argument against floating is that the foreign exchange markets may be unstable in the short run. This is the so-called J-curve phenomenon. If demand for imports is inelastic in the short run, a depreciation of the domestic currency will increase domestic currency demand for foreign exchange, thereby leading to a further depreciation. Thus, for the exchange rate to be stable requires some other agents to take positions in domestic currency. Motivation for such interventions is normally attributed to speculation or more generally to capital flows. But it is probably useful to think of this problem in terms of the organization of foreign exchange markets themselves. It is probably here that the key to understanding why developing countries almost universally peg their exchange rate lies.

The currencies of most developing countries are not fully convertible. One reason for this, suggested by McKinnon (1979, page 41) is that:

"Governments in less developed countries often lack the internal political power, and the accompanying fiscal and administrative capability, to allocate domestic resources directly by centralized fiat in the manner of the communist centrally-planned economies. Nevertheless, these same governments are usually not enamoured with the idea of a decentralizing economic decision-making through the unrestricted use of equilibrium prices and free markets. Rather, the government has a domestic plan and perhaps planning agency; its political office is seen as a mandate to control or influence as much economic activity as possible. However, the strongest instrument for internal economic control that can be freely manipulated by LDC governments is often the market for foreign exchange - where the clearing of international payments can be fairly easily brought under a single authority. Since imports and exports usually pass through centralized ports and border-crossing

stations, they are more easily monitored and taxed by a weak governmental authority than is commerce in the domestic hinterland."

The corollary of this is that control over trade necessarily involves control over domestic access to foreign exchange.

"Clearly, if all domestic firms and individuals were free to spend the domestic currency for foreign goods - using commercial banks as unrestrained financial intermediaries - the government's control would be undermined. Therefore, the clearing of foreign payments usually devolves in the central bank in LDCs ... Hence commercial banks are not free to create a unified market for foreign exchange, either spot or forward, as they might do with a floating convertible currency or one floating within given exchange margins.

Willy-nilly the central bank is cast in the role of announcing exchange rates for the various categories of transactions ... and then providing the necessary foreign exchange to those traders satisfying the rules and regulations." (McKinnon, op. cit.)

Thus in the cases which involve severe foreign exchange controls it should be clear that a fully operative foreign exchange market cannot arise. The problem, however, may be even more general than is suggested in the above quotations. It has been widely noticed that the exchange rates of the industrial countries have fluctuated considerably since the advent of floating, despite the fact that they have a diversified trade composition and deep and sophisticated financial systems. In contrast the foreign exchange markets of developing countries would be extremely thin, and it is hard to believe that they could be anything but highly unstable, if they attempted a free float. The experience of Israel would seem to confirm this. In this sense most developing countries may not be 'optimal currency areas'.

The importance of this argument should be clear. If the central banks of developing countries do not 'make' the foreign exchange market for their domestic currency, such market as there would be could be highly inadequate. It would almost certainly exhibit a high degree of instability. In practice, therefore, central banks have little choice but to announce a price at which they will buy and sell foreign exchange to traders. This procedure is exactly what is understood by the term 'pegging' the exchange rate. Once pegging is a reality, of course, it becomes difficult to decide, a priori whether the financial restrictions are to sustain trade controls or whether trade controls are necessary to maintain a particular exchange rate level or path. Certainly it would be reasonable to expect that, since central banks are obliged to peg exchange rates, restrictions on foreign exchange holding, capital flows and trade, would be necessary weapons for a government endowed with inadequate reserves.

The remainder of this paper is devoted to demonstrating that there is a strong possibility that large numbers of developing countries have inadequate reserves, in view of the fact that their central banks carry

the burden of balance-of-payments financing virtually single-handed.

III. Reserve adequacy

It has often been argued that developing countries will need proportionately more reserves than developed countries. Triffin (1961), for example, argued that:

"Reserves have to be higher in an unstable economic and political environment than in a world enjoying a greater degree of economic and political stability. Higher reserves are also needed by underdeveloped countries, with more volatile levels of export proceeds and capital imports, than by the richer and more diversified economies of the industrial countries. The burden of reserve accumulation, however, in relation to national wealth and savings on the one hand, and to competing needs for the financing of developmental imports on the other, will unfortunately be higher for the former countries than for the latter."

Triffin's argument is obviously quite plausible and was intended to apply in a situation where both developed and developing countries are pegging their exchange rates. However, in a situation, as at present, where developed countries are not pegging, there must be an overwhelming case for arguing that developing countries' reserve needs are proportionately greater. This theme will be expanded upon below.

Before looking at the reserve position of developing countries, it is worth considering what range of policies is open to central banks in the conduct of their foreign exchange operations. Three broad classes of operation can be identified, the sliding peg, the crawling peg and the stable peg. With a sliding peg the central bank announces the price at which it will buy and sell foreign exchange on a particular day, but this price is changed every few days or, at most, weeks. With the crawling peg exchange rate adjustments are much less frequent, intervals being often pre-arranged and measured more in terms of months. Two broad scenarios for crawling may be identified. First, 'passive' crawling typically involves periodic devaluations to compensate for past domestic inflation. Secondly, 'active' crawling, which involves an announced future path or bounds for the crawl, may provide a feasible course in a transition to lower domestic inflation. The stable peg involves maintaining a particular exchange rate for a considerable length of time, usually measured in terms of years, with only occasional and infrequent changes.

There must be a strong presumption that, other things being equal, reserve needs would increase with the infrequency of exchange rate adjustments. However, this would not be a safe basis for making cross-country comparisons, since the exchange rate variations will themselves reflect balance-of-payments stability. In other words, two countries of comparable size may require very different reserve stocks to achieve the same degree of exchange rate stability. All central banks actively pegging need reserves, and greater reserves would enable any central

bank to achieve greater stability or the same stability with less rationing.

There is no correct measure of reserve adequacy, and in reality each country should be looked at individually. However, there is a long history of reliance upon one particular measure and that is the ratio of reserves to annual imports. This is a very rough indicator, but strong trends in this ratio have been the main basis upon which judgments about the adequacy of liquidity have been made in the past. Table 2 contains the evidence of the obvious decline which led Triffin to his influential conclusions. And, indeed, Triffin went so far as to suggest that countries with reserve-import ratios below 0.2 had found themselves in desperate positions while those with ratios between 0.2 and 0.3 had been under severe pressure. These numbers may be used as benchmarks for looking at the current position, even though there may be a case for arguing that things are much more difficult in the current unstable environment.

Table 2

Ratio of world reserves to world imports

1928	0.42
1937	1.01
1938	1.17
1948	0.77
1957	0.49

Source: International Monetary Fund, International Reserve and Liquidity, 1958.

The appendix lists the reserves and imports for 84 developing countries for which data are readily available. Reserves are shown for end 1970 and 1979. Imports are shown for those years except in a few cases (marked *) where 1978 imports are used as 1979 figures are not available. The 1970 reserve figures include gold valued at \$35 an ounce. For 1979 (1978 in the case of summary data) gold holdings are listed separately, by weight, but are not included in the reserves value for calculating the reserve-import ratio. All reserves and imports are measured in dollars. There is one good and one bad feature about taking the end of 1979 as a benchmark. The good feature is that 1979 (and perhaps 1978) was as near to a 'normal' year as we have had since before 1973. The worst effects of the first wave of oil price rises had abated and the next wave had only just begun. The bad feature is that while the 1979 SDR allocation is captured in the data, the 1980 and 1981 allocations are not. However, since SDRs are allocated in proportion to IMF quotas, it means that most go to the rich countries. In fact over 80 per cent are allocated to the industrial countries and OPEC combined.

The reserve figures for the developing countries are largely self-explanatory. There are 47 countries with a reserve-import ratio of 0.3 or less. Thirty-seven of these have a ratio of 0.2 or less and 18 have a ratio of 0.1 or less. The summary figures are somewhat hard to judge without taking gold holdings into account. The industrial countries show a slight deterioration in their reserve position if gold is excluded, but if gold were valued at current market prices this decline would be substantially reversed. For example, if the industrial countries' gold were valued at \$600 per ounce, their reserve-import ratio would be 0.8 rather than 0.24. A similar exercise for 'Other Africa' only raises their reserve ratio from 0.17 to 0.23.

These data strongly suggest only one conclusion. There remains a severe international liquidity shortage for a substantial group of developing countries. These countries have been unable to benefit from any of the developments of the 1970s. They held little gold, they were allocated minimal quantities of SDRs, they are unable to permit a free float of their currencies, and yet they have been adversely affected both by the instability of commodity prices and the instability of the major exchange rates.

IV. Implications

The founding fathers of the IMF had it in mind to establish an institution that would assist central banks to stabilize their exchange rates without excessive recourse to trade controls, restrictions on capital flows or exchange controls. Only the central banks of developing countries really find themselves in a position similar to that feared by Keynes and White nearly 40 years ago. Without a substantial improvement in their international liquidity position it is hard to imagine that many countries will be able to survive without the periodic application of draconian economic policies or worse.

It is hard to see that any co-operative action by the developing countries as a group could alleviate their situation. It is true that reserve pooling within the European Monetary System (EMS) has assisted the stabilization of exchange rates within Europe. However, the position of the EMS provides a good example of why the developing countries could not easily form a similar system. One obvious but probably lesser problem is that reserve pooling requires the presence of excess reserves on the part of some members at all times. In this sense the 'poorest' nations could not go it alone. The real problem, however, is that for a system like the EMS to work, central banks have to be prepared to buy and sell each other's currencies. This does not require any net additions of external reserves. However, developing countries would find such a system difficult, if not impossible, to operate owing to the inconvertibility of the constituent currencies.

If the liquidity shortages of developing countries are to be relieved at all at anything short of drastic costs, in human terms, there is only one solution which suggests itself. This is a substantial

allocation of SDRs in favour of the developing countries. In the past, SDRs have been allocated only in proportion to IMF quotas. This is now inequitable for two reasons. First, the rich countries have benefited most from gold revaluation. Secondly, and perhaps more importantly, the reserve needs of developing countries are far greater (proportionately) owing to the necessity of foreign exchange market interventions as discussed above. Intervention activity for most industrial countries is voluntary; for developing countries it is compulsory.

One objection that will be raised is that such an SDR allocation amounts to a proposal for an 'Aid Link'. This is not true. If the SDR, as proposed, bears a market interest rate, there is no direct resource transfer involved in new allocations. The benefit to the developing countries is that it gives them automatic unconditional credit at market interest rates, whereas the poorest nations may only be able to borrow commercially at higher than market rates. The net gain comes from international risk pooling. The benefits to the industrial countries could be considerable, particularly if the allocation were accompanied by mutual trade liberalization. The simplest form of such an allocation would be a lump sum to all countries or to all countries with pegged exchange rates or to all non-oil developing countries. The goodwill resulting from such an allocation could be enormous, and it would serve the agreed goal of promoting the SDR as the centrepiece of the international monetary system.

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APPENDIX

Reserve Position of Developing Countries and Territories

Peg	Country	1970			1979			Gold
		Reserves	Imports	R/I	Reserves	Imports	R/I	
	Afghanistan	33	112	.29	441	315	1.4	.96
B	Algeria	339	1227	.27	2659	8250	.32	5.56
	Argentina	673	1868	.36	9388	6212	1.5	4.37
\$	Bahamas	22	337	.06	77.5	3949	.19	.02
	Bahrain	71	264	.27	614	2045	.3	.15
B	Bangladesh				386	1937	.20	.05
\$	Barbados	17	113	.15	66.12	426	.15	N/A
F	Benin	16	64	.25	14.2	283	.05	.01
	Bolivia	39	159	.24	178.2	1011.1	.17	.68
	Brazil	1187	2849	.42	8966	19804	.45	1.7
SDR	Burma	78	155	.5	203.3	732.1	.28	.25
\$	Burundi	8	22	.36	89.99	152.4	.59	.01
F	Cameroon,							
	United Rep.	81	242	.33	125.7	1275	.098	.03
F	Central							
	African Rep.	1	34	.03	44.1	499.9*	.09	.01
F	Chad	0	62	0	11.26	480*	.02	.01
\$	Chile	387	931	.41	193.8	4218	.04	1.52
	Colombia	151	843	.18	3844	3365	1.14	2.32
F	Congo	9	60	.15	42.23	259	.16	.01
\$	Costa Rica	16	317	.05	118.61	229.6	.52	.09
\$	Dominican Rep.	26	307	.08	238.6	1217	.19	.11
\$	Ecuador	69	274	.25	766.8	1951	.39	.41
\$	Egypt	118	787	.15	529	3837	.14	2.47
\$	El Salvador	56	213	.26	140.2	1037	.13	.51
\$	Ethiopia	71	172	.41	172.7	555	.31	.29
B	Fiji	27	104	.26	136.5	470	.29	.01
F	Gabon	15	80	.18	20.14	564	.03	.01
E	Gambia	8	18	.44	1.93	141	.01	N/A
	Ghana	12	411	.03	291.6	1022*	.28	.22
\$	Guatemala	78	284	.27	696.3	1504	.46	.52
\$	Guyana	20	134	.15	17.53	260.4*	.07	N/A
\$	Haiti	2	54	.04	55.0	220.6*	.24	.02
\$	Honduras	20	221	.09	209.17	831	.25	.01
	India	996	2125	.47	7432	8800	.84	8.56
	Indonesia	22	1002	.02	4062	7202	.56	.28
SDR	Iran	208	1662	.12	15210	9738	1.56	3.9
	Israel	436	787	.55	3063	8593	.35	1.23
F	Ivory Coast	119	388	.3	.47	2491	.059	.04
\$	Jamaica	139	525	.265	62.6	1010	.06	.01
SDR	Jordan	256	2079	.12	1166	1962	.59	.82
SDR	Kenya	220	442	.49	627.7	1660	.38	.08
	Korea, Rep.of	610	1984	.31	2959	20339	.14	.3

Reserve Position of Developing Countries and Territories
(continued)

Peg	Country	1970			1979			Gold
		Reserves	Imports	R/I	Reserves	Imports	R/I	
B	Kuwait	203	625	.32	2870	5207	.55	2.54
	Lebanon	386	559	.69	1531	2414	.63	9.22
\$	Liberia	-4	150		54.98	506.45	.12	N/A
\$	Libyan Arab							
	Jamahiriya	1590	555	2.8	6344	8313	.76	2.46
SDR	Malawi	29	99	.29	69.51	266.3	.26	.01
B	Malaysia	664	1413	.46	3915	7849	.5	2.13
F	Mali	-8	47		6	202	.03	.02
B	Mauritania	3	56	.05	113.7	258.6	.45	.01
	Mexico	744	2461	.3	2033	12086	.16	1.98
	Morocco	112	686	.16	557	3678	.15	.7
\$	Nepal	95	60	1.6	164	254	.64	.15
\$	Neth.Antilles	42	798	.05	73	3128*	.02	.55
\$	Nicaragua	41	199	.21	86.55*	596*	.14	N/A
F	Niger	19	58	.33	131.7	127*	1.03	.01
	Nigeria	222	1059	.21	5548	10942	.51	.63
\$	Pakistan	145	1151	.12	213	4052	.05	1.77
\$	Panama	17	357	.05	118.8	1185.34	.1	N/A
\$	Paraguay	18	76	.24	609.09	521	1.17	.04
	Peru	326	603	.54	.520	2146	.71	1.16
	Philippines	182	1210	.15	2250	6571	.34	1.7
	Qatar	18	64	.28	288	20289	.014	.27
\$	Rwanda	5	29	.17	152	179*	.85	0
	Saudi Arabia	662	711	.93	19273	25396	.76	4.57
F	Senegal	22	194	.11	19.1	582*	.03	.03
SDR	Sierra Leone	39	116	.34	46.7	304*	.15	N/A
B	Singapore	1012	2461	.41	5818	17636	.24	N/A
\$	Somalia	21	45	.46	43.8	287	.15	.02
	Sri Lanka	-36	388		517	1451	.36	.06
\$	Sudan	-9	288		67.4	1110	.61	N/A
\$	Syrian Arab Rep.	45	360	.2	581	3329	.17	.83
B	Tanzania,							
	United Rep.of	65	318	.2	68	1100	.06	N/A
B	Thailand	906	1293	.7	1843	7158	.26	2.46
F	Togo	35	65	.54	65.5	447	.15	.01
\$	Trinidad and							
	Tobago	43	542	.08	2137	1945	1.1	.05
B	Tunisia	46	306	.15	579	2830	.2	.17
SDR	Uganda	57	172	.33	52.7	255*	.21	N/A
F	Upper Volta	36	50	.72	61.5	226.4*	.27	.01
	Uruguay	157	231	.25	381	1206	.31	3.81
\$	Venezuela	1021	1994	.51	7284	11400	.64	11.46
	W. Samoa	5	14	.36	4.82	74.3	.06	N/A

Reserve Position of Developing Countries and Territories
(continued)

Peg	Country	1970			1979			Gold
		Reserves	Imports	R/I	Reserves	Imports	R/I	
\$	Yemen, Democratic	59	201	.29	209.74	544	.38	.04
SDR	Zaire	186	521	.36	206.69	599	.35	.25
SDR	Zambia	514	552	.93	80	722*	.11	.22

Country Groups

	1970			1979			Gold
	Reserves	Imports	R/I	Reserves	Imports	R/I	
Industrial countries	65806	211090	.31	200852	836746	.24	
Other Europe	5571	18830	.29	21452	69719	.31	834.87
Australia, New Zealand, South Africa	2962	10140	.29	3596	26854	.13	
OPEC	5226	11000	.47	57832	102400	.56	36.57
Other developing areas	13708	45500	.3	66129	194006	.34	56.11
Other Western Hemisphere	4291	14720	.29	27933	58376	.47	19.96
Other Middle East	1581	4440	.36	9013	25513	.35	14.77
Other Asia	5827	19020	.3	25302	88360	.28	19.14
Other Africa	2010	7350	.274	3881	22161*	.17	2.23

Source: IMF, International Financial Statistics, and UNCTAD, Handbook of International Trade and Development Statistics.

Note: Gold is M ozs. Reserves and imports are in \$M.

* denotes use of latest available figure in IFS, November 1980.

B = basket; F = French franc; £ = Pound sterling; \$ = dollar.

CHANGING VIEWS ABOUT THE ROLE OF THE SDR AND IMPLICATIONS FOR ITS ATTRIBUTES

Peter B. Kenen*

Introduction

This note is designed to clarify issues as a framework for discussion, not to press particular policy recommendations. I begin by asking what might have to be done to make the SDR the "principal reserve asset" in the international monetary system. The list of changes, I suggest, would be very long, and it would include large changes in the functioning of foreign exchange markets and of international capital markets. Rapid progress toward the long-term aim is, therefore, unlikely, and the effort may not be worthwhile. The costs could outweigh the benefits in both economic and political terms. But there may be a need for major changes in the reserve system to stabilize the composition of reserves and the rate of increase, and the SDR may have an important role to play in reforms whose benefits could outweigh their costs.

I have not tried to adopt the viewpoint of developing countries. In fact, I have emphasized the concerns and problems of the developed countries, especially those of the United States, because it is the main reserve currency country and would be heavily affected by reforms impinging on the reserve roles of national currencies. I emphasize those concerns and problems because they are the ones that I know best and because proposals for reform of the reserve system must be addressed to those concerns and problems, as well as those of the developing countries, if they are to have any chance of adoption. This is most certainly the case with regard to proposals that require additional amendments to the Articles of Agreement of the International Monetary Fund (IMF).

The role of the SDR in 1980

An important reserve asset should perform the three functions usually ascribed to any monetary asset. It should be widely used as a unit of account (or be denominated in a widely used unit). It should be a convenient means of payment, readily transferable between holders or usable in other ways to meet holders' needs. It should be an attractive store of value, which means that it should be available in adequate quantities and should bear a total rate of return, inclusive to appreciation or depreciation, competitive with those of other reserve assets. The SDR is still far from satisfying these desiderata.

Although the SDR is the unit of account used by the International Monetary Fund on its own books, in its transactions with member countries, and in its reports, it is not widely used outside the Fund. It may become more popular in the wake of the decision to simplify its valuation, and it will become much more important as a unit of account and a store of value if the Fund begins to play a major role in recycling, borrowing and lending large amounts in SDR. But I cannot adduce any reason for believing that it will come to rival other units of account, such as the United States dollar or deutschemark, in private or official transactions.

Most readers of this note can quote important exchange rates without hesitation - those between the dollar and the pound, the dollar and the deutschemark, or the dollar and the yen, and between these currencies and their own national currencies. They may be a few days behind the market, but the orders of magnitude will not be far wrong. How many can quote the exchange rates between the SDR and major national currencies? How much trade is invoiced in SDR? The oil-exporting countries have looked at the possibility of pricing oil in SDR but have not yet done so. How many countries peg their currencies to the SDR? Of the 94 countries listed by the IMF as pegging their exchange rates in June 1980, 58 countries pegged to a single national currency, 21 countries pegged to composites of national currencies other than the SDR, and 15 countries pegged to the SDR. The exports of this last group, however, totalled less than US\$ 30 billion in 1979, amounting to about 2 per cent of world exports, and one of the 15 countries (Iran) accounted for more than half of the US\$ 30 billion.

The SDR is not widely used as a medium of exchange. It cannot be employed in private foreign exchange trading because there is no market in which foreign exchange dealers can buy or sell SDR balances against national currencies. (Some commercial banks accept deposits denominated in SDR and can hedge their risks by making loans in SDR. But the transactions are executed in national currencies, and banks sometimes hedge their risks by making loans denominated in the national currencies that enter the SDR basket, rather than loans denominated in SDR.) It would be possible for banks and other foreign exchange dealers to buy and sell balances in SDR without having the right to hold the "official" SDR on the books of the IMF. They buy and sell national currencies now without having the right to hold balances at the central banks that issue those national currencies. But foreign exchange trading in SDR balances would probably be easier and would be seen to be safer if participating banks could hold the "official" SDR (or claims on a clearing house that could, in turn, hold its reserves in "official" SDR). In any event, the absence of active foreign exchange trading in the SDR means that it cannot be used for official intervention or for other transactions in which central banks engage in order to stabilize or influence exchange rates - the chief ways in which a reserve asset is employed as a medium of exchange.

The SDR is used to make official settlements, but most of these have been transactions with the IMF. Here are the figures for the three most recent years (in SDR million):

Type of transfer	Year ending 30 April		
	1978	1979	1980
To other participants	1,325	2,613	1,733
To the IMF	1,887	1,295	1,631
From the IMF	1,287	1,375	1,513
Total	4,499	5,283	4,877

Source: International Monetary Fund, Annual Report 1980.

These figures, moreover, exaggerate the extent to which the SDR is transferred freely between governments. In each of the last two years, about SDR 1.0 billion of the transfers to other participants reflected transfers from the IMF. Drawings of SDR from the IMF were transferred (with designation) to other member countries in exchange for the other members' currencies.

The stock of SDR is quite small, and it has been shrinking compared to holdings of other reserve assets. Consider the statistics in table 1. When gold holdings are valued at the old official price (SDR 35 per ounce), the share of the SDR in total official reserves was only 5.8 per cent in 1973, shortly after SDR allocations were discontinued, and it fell to 2.9 per cent in 1978, just before SDR allocations were resumed. In May 1980, after two new allocations, the share was only 5.1 per cent. When gold holdings are valued at the London market price, the share of the SDR fell to 2.4 per cent in May 1980. Furthermore, new allocations of SDR have been unimportant compared to other factors affecting the stock of reserves. Consider the statistics in table 2. In 1979, the first year of the new allocations, SDR holdings rose by SDR 4.4 billion. But gross reserves grew by SDR 26.3 billion, excluding gold holdings, and by SDR 210.2 billion, including gold holdings valued at market prices. (The increase in the gold price accounts for more than SDR 200 billion of the increase, or over 95 per cent. The number is larger than the SDR billion shown in table 2 because some of the ECU issued in 1979 were distributed to "monetize" increases in the market value of the gold deposited by members of the EMS.)

These calculations are not meant to minimize the importance of new allocations to individual countries, especially to developing countries. Because gold holdings are concentrated heavily in the hands of developed countries, the increase in the value of gold holdings accounted for a larger fraction of the increase in reserves of developed countries, and SDR allocations accounted for a larger fraction of the increase in reserves of developing countries. From the end of 1978 through May 1980, the total reserves of developed countries including gold holdings valued at the London market price, rose by some SDR 188 billion, and the increase in their holdings of SDR accounted for 2.9 per cent of the increase. The total reserves of developing countries rose by some SDR 60 billion, and the increase in their holdings of SDR accounted for 4.4

Table 1

The SDR in total official reserves (in SDR billion)

Item	December 1973	December 1978	May 1980
Special drawing rights	8.8	8.1	16.2
Reserve positions in the IMF	6.2	14.8	12.1
Foreign exchange	101.6	221.1	258.7 a/
Sub-total	116.6	244.1	287.0
Gold at SDR 35 per ounce	35.7	35.8	32.7 b/
Gold at London market price	94.9	177.3	381.5 b/
Totals			
With gold at SDR 35 per ounce	152.3	279.9	319.7
With gold at London market price	211.5	421.4	668.5
Share of SDR (per cent)			
In sub-total (excluding gold)	7.5	3.3	5.6
In total with gold at SDR 35 per ounce	5.8	2.9	5.1
In total with gold at London market price	4.2	1.9	2.4

Sources: International Monetary Fund, Annual Report 1980, and International Financial Statistics.

a/ Includes European Currency Unit (ECU) claims of European Monetary System (EMS) members.

b/ Net of gold transferred by EMS members in exchange for ECU claims.

per cent of the increase. If gold holdings are set aside because they are not easily used, SDR holdings accounted for 27.8 per cent of the increase in reserves of developed countries and 10.9 per cent of the increase in reserves of developing countries, but fully 30.2 per cent of the increase in reserves of non-oil developing countries. These figures, moreover, understate the contribution of SDR allocations to the reserves of developing countries, because they are based on SDR holdings, not allocations, and developing countries were net users of SDR during the period in question.

The point made before, however, remains valid. The resumption of SDR allocations in 1979 did not raise the share of the SDR in total official reserves, even if the increase in the value of gold holdings is disregarded. It served merely to offset the earlier decline. And the stock of SDR is still very small - too small for the SDR to be considered an important store of value.

Table 2

Changes in total official reserves (in SDR billion)

Item	1978	1979
Special drawing rights	-	4.4 ^{b/}
Reserve positions in the IMF	-3.3	-3.0
Foreign exchange	20.8	24.9
US dollars	9.5	-17.3
Due to change in SDR value	-10.6	-1.3
Other major reserve currencies ^{a/}	8.6	9.5
Due to change in SDR value	2.2	0.1
ECU	-	32.5 ^{c/}
Due to change in SDR value	-	4.8
Other, net	2.7	0.2
Gold at London market price	39.4	184.1
Due to change in SDR value	38.5	200.0
All assets	57.7	210.2

Sources: International Monetary Fund, Annual Report 1980, and International Financial Statistics.

a/ Pound sterling, Deutschemark, French franc, Swiss franc, Dutch guilder, Japanese yen.

b/ Includes effects of transfers between the Fund and member countries, as well as new allocations.

c/ Includes ECU issued because of the increase in the value of gold deposited by members of the EMS, so that the increase in reserves ascribed below to the change in the SDR value of gold holdings understates the effect of the increase in the price of gold.

The rate of return on the SDR has not yet been competitive with rates offered by currency reserves, let alone the rate of return on gold reserves as a result of the rapid increase in the price of gold. The IMF has calculated rates of return on various reserve assets, including changes in their SDR values. Below are the annual rates of return calculated from the first quarter of 1975 through the first quarter of 1980 (what would have been earned per year by converting an SDR into a reserve currency at the end of the first quarter of 1975, investing at the national interest rate used to compute the SDR interest rate, and

converting the proceeds into SDR at the end of the first quarter of 1980):

United States dollar	6.75
Deutschemark	8.79
Pound sterling	8.53
French franc	7.62
Japanese yen	10.32

Source: International Monetary Fund, Annual Report 1980.

The interest rate on the SDR, however, was held below the average of the national interest rates used in these calculations (the so-called full combined rate). In recent years, it has been held at 80 per cent of the average. Had this percentage been applied for the whole of the period under study, the interest rate on the SDR would have averaged 5.77 per cent per year, lower than the lowest of the rates earned on the five reserve currencies. (If the rate had been 100 per cent of the full combined rate for the whole period, it would have averaged 7.21 per cent per year, higher than the rate for the dollar but lower than the rates for the other four currencies.) Some countries, moreover, have earned rates higher than those shown above by investing in Eurocurrency deposits, which yield more than the treasury bills and other money market assets used in the IMF calculations.

Making the SDR the principal reserve asset

There are two ways to look at the task of making the SDR the principal reserve asset in the international monetary system. One can ask how to raise substantially the share of the SDR in total official reserves and to keep that share from falling thereafter. One can ask how to make the SDR a more attractive reserve asset, so that countries will want to hold more SDR in their reserves. I deal here with the quantitative problem and argue that it cannot be solved completely without major changes in the monetary system, going far beyond the substitution of one asset for another. I deal with the qualitative problem in the next section of this note, where I argue that the SDR should be made to play a larger role in the monetary system, even if it is not made the principal reserve asset for the foreseeable future, and that it must be made more attractive as an asset if it is to play that larger role.

With much patience and good luck, one might hope to make the SDR the principal reserve asset by new allocations. Let us go back momentarily to the start of 1970, when allocations started, and ask what would have happened if allocations had continued year after year without change in amount, if stocks of all other reserve assets had been held constant (including reserve positions in the IMF), and if the values of all assets - exchange rates and the price of gold - had been constant too. At the end of 1979, a decade later, official reserves would have

totalled about SDR 110 billion (compared to SDR 303 billion, the stock actually outstanding with gold valued at SDR 35 per ounce) and the share of the SDR would have reached 28 per cent (compared to about 4 per cent). Extending the process for another decade, reserves would have totalled about SDR 141 billion by 1989, and the share of the SDR would have reached 44 per cent. (If allocations had been kept at a constant fraction of reserves, not constant in amount, the stock of reserves would have been larger, along with the share of the SDR.)

Modest allocations can mount up. But other things do not stay constant. Supplies of other reserve assets grew very rapidly in the 1970s, the SDR price of the main reserve currency declined, and the SDR price of gold rose astronomically. Even if one were quite patient, then, one could not rely on new allocations to make the SDR much more important as a reserve asset. And if one were impatient, allocations could not possibly do the job. Substitution would be needed.

I am thus led to list three steps that would have to be taken if rapid progress were desired:

- (1) Large-scale substitution of SDRs (or SDR-denominated assets) for other reserve assets, beginning but not ending with reserve currency holdings.
- (2) Restrictions on supplies (or holdings) of other reserve assets.
- (3) Stabilization of the SDR prices of all other reserve assets, or the mandatory use in valuation and reserve transactions of stable accounting prices disconnected from current market prices.

The first step would raise the share of the SDR. The second would forestall fast growth in stocks of other reserve assets, so that they could not outstrip the stock of SDR, reducing its share. The third would keep the values of other reserve assets from rising in terms of the SDR, as the value of gold holdings rose in the 1970s. If substitution were comprehensive, replacing all reserve currency and gold holdings with SDR, there would be no need for the third step, because exchange rates and gold prices would not affect the value of official reserves. (Valuation gains might be "monetized" as in the EMS, but this procedure would not reduce the share of the SDR, because valuation gains would appear in the form of new SDRs.) If substitution were not comprehensive, the third step would be necessary, not only to prevent reductions in the share of the SDRs but also to sustain the demand for them. Valuation gains on other reserve assets would raise total reserves and could erode political support for new allocations of SDRs.

These three steps could be taken without amending the Articles of Agreement of the IMF. Substitution could take place, as was proposed last time, through an account managed by the IMF but not on its own books. The regulation of reserve supplies or reserve holdings could be carried out by informal agreement, much as the Group of 10 countries agreed among themselves to forego any increase in the Group's gold

holdings a few years ago. Rules relating to asset valuation could also be adopted informally. But it would be hard to take these steps informally today, harder than it would have been 10 years ago, because more countries hold large stocks of reserves. At the end of 1969, the Group of 10 countries plus Switzerland held two-thirds of total reserves, and there were only 10 other countries that had reserves as large as 1 per cent of the global total. At the end of 1979, by contrast, the Group of 10 countries plus Switzerland held only half of total reserves (with gold valued at SDR 35 per ounce), and there were 14 other countries that had reserves as large as 1 per cent of the global total.

But let us set aside the constitutional question, as it is not the main obstacle to rapid progress. And let us postpone momentarily the technical and political problems that blocked agreement on a substitution account at the Hamburg meeting of the Interim Committee. They are complex but not fundamental. The main obstacle is found at the next step - restricting supplies or holdings of other reserve assets to keep them from outstripping the stock of SDR.

Under a system of pegged exchange rates, reserve currency holdings come into being because reserve centres run balance-of-payments deficits. I will not take time to revive old arguments about responsibility - whether the reserve centres are to be blamed when supplies of reserve assets grow too fast or whether the blame must be shared because the policies of other countries can drive the reserve centres into deficit involuntarily. Those arguments are not relevant here. Let us recall instead the other point made often in debates about the Bretton Woods system. Mandatory asset settlement would limit reserve currency creation and would also make the monetary system more symmetrical.

Under present arrangements, with more flexible exchange rates, mandatory asset settlement would still serve to limit reserve currency creation. It is, in fact, implied by any plan to limit reserve currency holdings. Countries that build up reserves in one asset must have the right to swap that asset for another. But mandatory asset settlement would make the present monetary system much less symmetrical. It would impose on reserve centres an expensive obligation from which all other countries are exempt. If central banks and governments are obliged to hold most of their reserves in SDRs and must therefore abstain from accumulating dollars, those that acquire dollars by any method whatsoever must be free to present them to the United States for conversion in SDRs. Conversions need not take place at rigid prices. They could take place, for example, at the prevailing dollar price for SDR, and this price could be determined as it is today. But the United States would be compelled to swap SDRs for dollars in unlimited amounts. It would be denied the freedom of choice conferred by Article IV of the amended Articles of Agreement of the IMF.

Let us approach the problem from another standpoint. Limits on supplies or holdings of reserve currencies would impose an asymmetrical

obligation on the United States because there are asymmetries in the functioning of foreign exchange markets and of international financial markets. Although the reserve currency role of the dollar has declined in recent years, the dollar is still the main vehicle currency in foreign exchange markets. In 1979, for example, 99 per cent of all transactions in the London market involved the dollar, and the figures for the Frankfurt and Zurich markets are not much lower.^{1/} In consequence, the dollar continues to be the main intervention currency, and dollars bulk large in the intake of reserves that results from intervention. A number of developing countries acquire their reserves in dollars for an analogous reason - that payments for many primary products, including oil, are made in dollars. Finally, a large part of Eurocurrency lending is still done in dollars, despite the increase in deposits of other countries that has received so much attention. Here are the most recent figures for European banks (in \$ billion):

End of year	Claims outstanding on non-banks		
	Total	Dollars	Other
1977	97.2	65.5	31.7
1978	127.2	84.2	42.9
1979	157.7	104.3	52.4

Source: Bank for International Settlements, Fiftieth Annual Report, 1980.

By implication, net lending to non-banks, including official institutions, totalled \$30.0 billion in 1978, of which \$18.7 billion was in dollars, and it totalled to 30.5 billion in 1979, of which \$20.1 billion was in dollars. Countries that built up their reserves by borrowing, directly or indirectly, were thus likely to acquire additional dollars.

These uses of the dollar lie outside the control of the United States. It cannot even be said that the amount of intervention depends on the United States' balance of payments because other countries are free to decide whether they will let their currencies appreciate or will intervene and take in dollars. To put the point strongly, but not too strongly, the United States' balance of payments is defined in the short run by the foreign exchange policies of other countries.

Limitations on holdings of dollars and of other currencies will

^{1/}See The Foreign Exchange Markets under Floating Rates, The Group of Thirty, 1980, table 3.

introduce asymmetries disadvantageous to the reserve centres unless and until other institutional asymmetries are eliminated. Taking the argument to its logical conclusion, the SDR cannot become the only reserve asset in the monetary system unless steps are taken beforehand to make it a major vehicle currency in the foreign exchange markets, so that it can become the only intervention currency, to make it the main currency for invoicing third country trade, especially in primary products, and to make it the main currency for international lending (not only in Eurocurrency markets but in national capital markets as well). To do any of these things, of course, it will be necessary first to promote the private use of the SDR (or of claims denominated in SDR). This is one reason for the emphasis placed recently on making the SDR more attractive as an asset (another reason is given below).

It may not be necessary to go all the way in the directions just discussed in order to protect the reserve centres from onerous obligations. But substantial movement would be needed, and there would be opposition. The United States may not want to move in these directions, even if it is prepared to countenance and actively assist in reducing the reserve role of the dollar. Limitations on the other functions of the dollar, in foreign exchange markets and capital markets, will be resisted by influential banks and other private institutions because they believe that their competitive positions derive in part from the widespread use of the dollar in international financial markets.

Doing the difficult and postponing the impossible

The chief implication of my argument is clear. It is, I fear, impossible to make rapid progress toward the long-term objective of converting the SDR into the principal reserve asset. Nevertheless, the SDR can and should be made to play a much larger role in the international monetary system. Many developing countries will need new allocations, not to finance deficits but to build up their reserves. This will be true of the low-income countries that cannot borrow in Eurocurrency markets. It will be true of some middle-income countries that will have to borrow more or refinance existing debts and have therefore to strengthen their reserve positions in order to enhance their creditworthiness. The SDR, moreover, has an important part to play in the consolidation of the reserve system - in halting or reversing the trend toward a multiple reserve-asset system.

When the case for creating the SDR was presented, almost 15 years ago, it was based on the need to provide for growth in global reserve holdings. New gold supplies were small and would get smaller because the price of gold was fixed and costs of production were rising, and because the non-monetary demand for gold was rising, too. New supplies of dollars would not serve the purpose because an increase in the quantity of dollar reserves would undermine their quality; the liabilities of the United States would get larger than its gold stock, impairing the convertibility of dollar reserves. Because the SDR was designed to supplement supplies of other assets, it was made to look

much like paper gold. It was to be transferable at a constant gold price. It was given a low interest rate. It was not as good as gold because no country had to buy it in unlimited quantities and no country could run down its holdings completely. But these restrictions, it was said, could be relaxed eventually. There was not much discussion of marketability because it was not needed for transferability.

The situation is quite different now. The stock of reserves has not kept pace with inflation. When gold is valued at its old official price, the ratio of reserves to imports works out at 25.8 per cent for 1979, compared to 30.5 per cent for 1969. But there does not appear to be very much concern today about a shortage of reserves because reserve supplies look much more elastic than they did when the SDR was designed, and because most governments are striving to combat inflation. Increases in reserves are not welcome when they must be bought by printing money.

The biggest changes in the situation, however, have to do with composition and transferability. The diversification of reserves that started a few years ago has altered composition substantially. In December 1973, the dollar accounted for 84.6 per cent of identifiable currency reserves; sterling was next with 7.0 per cent, and the deutschemark was third with 5.8 per cent. In December 1979, the dollar accounted for 76.2 per cent, the deutschemark came next with 12.5 per cent, the yen was third with 3.8 per cent, and the Swiss franc was fourth with 3.3 per cent. If the ECU is treated as a reserve currency, the share of the dollar falls to 65.1 per cent, the ECU follows with 14.7 per cent, and the shares of the deutschemark, yen and Swiss franc fall to 10.7 per cent, 3.2 per cent and 2.8 per cent, respectively (data from International Monetary Fund, Annual Report 1980). Diversification continued in 1980, with encouragement from the Federal Republic of Germany, which abandoned its long-standing opposition to a reserve currency role for the deutschemark. What was a dollar standard a few years ago is now a multiple reserve-asset standard. The prices of the various reserve assets are flexible, not fixed, and transferability is not guaranteed. In fact, the SDR, the ECU, and reserve positions in the Fund are the only reserve assets that can be transferred on the books of official institutions (and the SDR can be transferred more freely than it was at first because holdings do not have to be reconstituted). All other reserve assets must be marketed at variable prices.

Much has been written about the "inherent instability" of a multiple reserve-asset standard. It has been compared to the bimetallic standard and to the old gold-dollar standard. These comparisons are flawed. The bimetallic standard was "inherently unstable" because governments attempted to peg the prices of gold and silver when relative supplies were shifting rapidly and relative demands were changing, too. The same defect afflicted the gold-dollar standard. No attempt is made today to peg the prices of the main reserve assets - exchange rates or the price of gold - so "speculation" by private and official holders is more apt to be self-limiting than self-aggravating.

However, the new system is far from satisfactory. Shifts in reserve-asset holdings can affect exchange rates, and changes in exchange rates can shift reserve-asset holdings. The currencies of countries at the centre of the system are exposed to larger exchange rate fluctuations. The reserves of all countries are exposed to changes in value and, more importantly, to changes in liquidity, on account of economic and political disturbances.

The same apprehension that led to diversification may make it very hard to reach widespread agreement on consolidation of the reserve system. No simple plan can satisfy all reserve holders. I am therefore persuaded that progress in consolidation must be based on the principles adopted in 1979 at the Belgrade meeting of the Interim Committee. Consolidation, it was said, should take place by voluntary substitution, with the benefits and costs equitably shared between the reserve centres and the reserve holders.

This is not the place to examine in detail the reasons for the breakdown of the negotiations at the Hamburg meeting of the Interim Committee, and it is not the place to lay out a new plan. (Two new plans have been advanced recently, one for a substitution account on the books of the IMF, integrated with the SDR Department, and one that would connect substitution with recycling.)^{2/} My own views can be summarized quite briefly:

- (1) It may be wrong in principle and counterproductive in practice to link substitution with recycling. Substitution should replace one reserve asset with another. The nature and success of the enterprise should not be complicated or jeopardized by engaging at the same time in maturity transformation. The quality of the new reserve asset should not be seen to depend on the creditworthiness of long-term borrowers.
- (2) It was not wrong in principle but may have been unwise in practice to propose the use of IMF gold holdings as "backing" for the new reserve asset. The role of gold, if any, should be different. Participants in a substitution account might be asked to deposit gold, along with the reserve currencies, in exchange for the new reserve asset. The United States might be asked to do so, too. (Valuation gains due to an increase in the price of gold could be "monetized" in part, as in the EMS, or used entirely to protect the solvency of the substitution account.)
- (3) The success of voluntary substitution will depend on the attributes of the new reserve asset. It must be readily

^{2/}See the remarks by J.J. Polak at the Georgetown University Bankers Forum summarized in the IMF Survey, 27 October 1980, and the address by H. Johannes Witteveen at the Second International Monetary Conference in Philadelphia on 13 November, 1980.

transferable at a fairly stable price in terms of the main currencies (which is, of course, the reason for pricing it in terms of the SDR); it should bear an attractive rate of return (no lower than the full combined rate, which is the basis for the interest rate on the SDR itself); and it should be backed by a credible guarantee.

- (4) Substitution should be as permanent as possible. Otherwise, it will not stabilize the composition of reserves. Accordingly, the liquidity of the new reserve asset should not be guaranteed by recourse to encashment. It should instead be guaranteed by designation, by medium-term repurchase arrangements, and by the marketability of the asset. (Exclusive reliance on designation has a serious drawback. Some countries may decline to participate in substitution if it exposes them to large-scale designation. The extent of substitution may therefore be limited by extensive designation, and the main aim of the exercise would then be impaired. Designation is needed at the outset because marketability will take time, but its role should be restricted from the start.)

These thoughts lead me at long last to comment on the attributes of the SDR itself. If one were concerned to make the SDR the principal reserve asset in the system, there would be a need for markets in SDR deposits; otherwise, the SDR could not be used in foreign exchange markets and could not become an intervention currency. I have argued, moreover, that the SDR claim issued by a substitution account should be made marketable as quickly as possible, otherwise there would be a need for large-scale designation and for recourse to encashment. It is not important in the short run, however, to move toward the marketability of the SDR itself. There has been confusion on this point, and it should be dispelled. But the SDR should not be too different in liquidity or yield from the claim issued by a substitution account. If that claim is more attractive, it may dominate the SDR. Holders will not want more SDRs, and new allocation could come to a halt. It is therefore important to raise the interest rate on the SDR - to set it at 100 per cent of the "full combined rate" rather than 80 per cent - if the claim issued by a substitution account is made to pay a market rate. Finally, it is important in the longer run to make wide use of the SDR as a unit of account - in IMF and World Bank borrowing and in intergovernmental transactions. Growth in demand for the SDR can come only with increased familiarity, and many who should know it well have not made its acquaintance.

ISSUES ARISING IN MAKING THE SDR THE PRINCIPAL INTERNATIONAL RESERVE ASSET

Benito Legarda*

Under the second amendment to the Articles of Agreement of the International Monetary Fund (IMF), the Special Drawing Right (SDR) was supposed to be the centrepiece of the international monetary system. Events since the Kingston Agreement in 1976 have not, however, borne out these expectations. The SDR is a small and shrinking proportion of world reserves, and has been computed to be only 3 per cent of the total.

Some attempts to rationalize the situation were made by quarters connected with the International Monetary Fund. It was said that the centrepiece need not be large, but would depend for its influence on its qualitative attributes. This argument was, however, quickly seen to be a convenient rationalization for an unsatisfactory situation, and not much has been heard of it lately.

1. This leads to the first point, namely, that qualitative attributes are not enough and that the first requisite in making the SDR the principal international reserve asset is that it increases in amount not only absolutely but also in relation to other reserve assets. It may seem tautological to say that the SDR can increase its importance by increasing in amount, but in view of the attempted rationalization referred to above, the point is worth stressing.

The increase in the amount of SDRs would initially mean a relative decrease in the use of national currencies as international reserve assets. One way of injecting the SDR into the system is to have larger and more regular allocations. The argument has repeatedly been advanced, largely by developed country quarters, that to increase SDR allocations at a time of inflationary conditions would be to aggravate these conditions. Expressed in this way, what is being attempted is a role reversal not contemplated in the second amendment; the national currencies become the centrepiece and the SDR becomes a minor supplement to them.

There are also graver implications for the international management of liquidity. In arguing that SDR allocations would aggravate inflation, those who advance this view are delivering the prerogative of creating international liquidity into the hands of national monetary authorities. The argument is thus seen to be self-serving. National authorities can issue all the national currencies they wish for use as

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international reserves, and then cite the accompanying inflation to argue that SDR allocations should be suspended.

2. This leads to the second consideration. If these trends are to be reversed, if SDRs are to grow relative to national currencies and occupy the central role in the international reserve asset picture, by what means can this be accomplished? Could it be by compulsion, inducement, or a combination of both? Compulsion would presuppose the existence of an authority with the power to enforce its decisions. Inducement would presuppose that the policy measure would be geared towards making the SDR a market-oriented instrument. Thus, the lack of coercive power by the international monetary authority might mean that we would be left with only the prospect of inducement to carry out the objective of making the SDR the principal international reserve asset.

This, however, is not necessarily the case. The co-operation of the national authorities can be secured to control global liquidity expansion which some of them at least have been talking of regulating, namely, the Eurodollar market. This would run counter to the views of some developing countries, especially those with established credit ratings and with access to international capital markets. However, this concern might be mitigated by an assured increase in SDRs to meet such legitimate liquidity requirements. If we are not to rule out the use of some sort of legal compulsion in achieving the objectives, then it is an issue which must be squarely faced, and the advantages and disadvantages to the developing countries of a situation in which there is no regulation of Eurodollar markets must be weighed against one in which there is.

Not much more can be said in a paper that only seeks to identify issues regarding possible use of legal compulsion, at least in part, to assist the SDR in becoming the centrepiece of the international monetary system. We may now, therefore, turn to issues in connexion with inducements leading to the SDR becoming more important by making it more attractive to all.

3. The third point we come to in this paper is, therefore, whether the SDR is to remain an instrument which attempts to be a compromise among the divergent interests of members of the IMF or whether we should definitely set about converting it into a competitive market instrument. In pursuing the latter objective, the first focus should be on yield. Yield is generally regarded as having two elements, namely, the protection of capital value, and interest. In less inflationary times, it was conceived that the rate of interest would move in such a way as to cover any loss in capital value. More recent experience, however, seems to suggest that investors would like specific protection for the capital value of financial assets through such devices as indexation, escalation clauses, etc.

This brings up the old question of the conflicting interests of the users and holders of SDRs. In the international world, these are very

often the interests of the least developed countries versus those of the more advanced industrial countries. But the latter have been joined in recent years by the so-called capital surplus developing countries, and it is this class that has been more concerned about the protection of the value of financial assets, and with some justification, since many argue that they should not be required to exchange appreciating natural assets for depreciating financial assets. In any event, this is another area where the advantages and disadvantages must be weighed as among the various participants.

4. This leads to the fourth point, namely, that if the SDR is to evolve into a competitive market instrument, then the interests of the investors within the narrow ambit of the asset itself would, by the very logic of the situation, probably take precedence over the interests of the users. The interests of the latter cannot, however, be ignored and one way to meet them would be to place the SDR in the larger context of a greatly expanded IMF. This would mean that there would have to be a greater increase in quotas, perhaps as much as four or fivefold, in order to restore their relationship to the value of world trade that prevailed, say, 15 years ago. Since quotas represent funds akin to equity financing in the private sector, the Fund, in accommodating the requests of the least developed countries, would not have to depend solely on funds from market sources but could draw on its own "equity" resources and blend market-derived funds with those coming in through the substantial increase in quotas. It would appear that this is one of the more promising avenues for the reconciliation of the interests of suppliers and users of funds.

5. This takes us to the fifth point. We have, in effect, been discussing the evolution of the SDR from a mere book entry into a competitive market instrument. A competitive market instrument would presumably be negotiable and, if it is so, then it would start taking on the attributes not only of an asset but of a medium of exchange. As a medium of exchange, it could be used not only to settle outstanding balances among countries but also for open market operations and foreign exchange market intervention.

6. This shades into the sixth point, which is that its characteristics as a medium of exchange would be reinforced if its ownership were more widespread and were to include even private parties. The facetious story is sometimes told that the wife of a Swiss banker remarked that she would believe in the SDR if she could wear it around her wrist. The story may or may not be true, but it illustrates the widespread conviction that the SDR should be made more usable and more attractive if it is to assume a greater role in world finance.

7. A seventh point is that the SDR must be of unquestionable liquidity. At this time, a transaction in SDRs is more complicated and time-consuming than one in national currencies. In the world of international finance, timing is crucial. If the SDR cannot compete with currencies on this particular point, then it indeed faces a considerable handicap.

8. The eighth point I would like to bring up is the composition of the SDR. It has evolved from what was called "paper gold" to a basket of 16 currencies and now to a basket of five currencies. There is a widespread feeling, not only among the members of the International Monetary Fund but among non-members as well, that the SDR could benefit from what would be regarded as a more objective basis for the valuation of this instrument. At present, it represents five national currencies. These currencies are issued by national authorities for valid national objectives. Such objectives, however, at any given moment of time, do not necessarily coincide with the desiderata of international monetary needs. There is the added point that while fluctuations in the values of component currencies may cancel one another out and lead to stability in the overall value of the SDR, this stability partakes of the monetary illusion since all currencies have been losing their value in terms of goods. This has been referred to earlier in the discussion of the maintenance of the capital value of the instrument, but here one can go a step further and say that besides currencies, there should be a commodity element.

At one time, during the days of the Committee of Twenty, the then Finance Minister of Malaysia, Tun Tan Siew Sin, spoke at regional caucuses of commodity baskets. If, however, this were to be narrowed down to one commodity, this commodity element could logically, and from the accumulated experience of mankind, be gold.

The objectivity of gold as a basis for valuation is, of course, as much open to question as the stability of the values of national currencies. It could be argued that two large gold producers control the bulk of world output. Just as national currencies are subject to the vagaries of national politics, so the gold market may be subjected to the policy imperatives of the major gold producers. But at least it is a commodity that is traded and its producers are not concentrated geographically nor do they partake of the same social and political values, and it could be argued that there is somewhat greater diffusion of interest with regard to gold than there is in the matter of the issuance of a national currency. It is also claimed that gold would exercise a salutary disciplinary influence on the national currencies in the SDR basket. The inclusion of gold in the SDR basket, along with the present component currencies, is therefore one of the issues that should be taken up in any examination of the matter.

9. Finally, an issue that has to be faced is whether there is any need for a substitution account as a transitional measure. The substitution account worked out by the IMF was put on the shelf at the Hamburg meeting of the Interim Committee last spring. Would it be possible to devise a substitution account that would merit more universal acceptance? This is not inconceivable, and the classification of desiderata for such a substitution account could be one of the points taken up by the study.

10. Outside a formal substitution account, the growing possibility of SDR-denominated claims may be taken up, and the question may be examined

whether the issuance of these claims enhances the role of the SDR or simply postpones the effectivity of the SDR as the principal reserve asset in the international monetary system.

VALUATION OF THE SDR: THE CASE FOR A STANDARD
FIVE-CURRENCY LOGARITHMIC BASKET

John Williamson*

I. Introduction

The purpose of this paper is that of deploying the arguments in favour of a particular solution to the question of how the value of the SDR should be determined in relation to currencies. This solution is similar to that which will obtain as from 1 January 1981 in all respects except one: the difference lies in the method of averaging exchange rates, which currently employs an arithmetic mean but would, under the proposed "logarithmic basket", be based on calculation of a geometric mean instead. The paper argues that any other deviation from prospective practice would be unwise and severely detrimental to the prospect of making the SDR the principal reserve asset.

The plan of the paper is as follows. Section II identifies the alternative methods of SDR valuation that have been proposed. Section III presents a brief statement of the criteria that are relevant to the choice of a method of valuation, and argues that these point strongly towards the standard basket solution. Section IV considers the desirable size of the basket. Section V presents the reasons for preferring a logarithmic (standard) basket to the conventional form.

II. Alternative methods of valuation

Four possible valuation techniques were discussed by the Committee of Twenty (C-20) and are described in the Outline of Reform, annex 9. These are listed below.

1. The standard basket. The value of the SDR is defined as being equal to that of a basket of currencies. This value (v_j) in terms of any currency j can be calculated on the basis of the defined quantities (q_i) of each currency i in the basket, plus the relevant exchange rates (e_{ij}) between i and j :

$$(1) \quad v_j = \sum_{i=1}^n e_{ij} q_i.$$

(Here e_{ij} is defined as the number of units of currency j per unit of currency i .)

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2. The adjustable basket. The value of the SDR is again defined as equal to that of a basket of currencies, but the quantities q_i of each currency in the basket are redefined following any change in the central rate (c_i), in such a way as to re-establish the initial weight (w_i) of each currency:

$$(2) \quad q_i = w_i/c_i.$$

Countries without a recognized central rate would in effect have to be dropped from the basket, although there was support in the C-20 for seeking formulae that would disguise this fact (see the Outline, p.44).

3. The asymmetrical basket. The value of the SDR would again be defined as equal to a basket of currencies, in which the quantities q_i might change. In this case, however, the adjustment to q_i described in equation (2) would be made only when a currency was devalued. Similarly, a currency that appreciated (though relative to what initial point was not clear) would remain in the basket, but one that depreciated would again be de facto eliminated.

4. The abstract SDR (or Par Value Technique, or SDR 1 = SDR1). The SDR would be defined as an abstract numéraire, equal only to itself; currencies would be defined in terms of the SDR, but not vice versa. The SDR would thus have a position akin to gold in the Bretton Woods system. This would require the operation of a par value system. Alternatively, it has been argued that it would be possible to resort to this definition and to leave the value of the SDR to be determined by the market once it became an actively traded asset (Chrystal, 1978, p.26).

Four other valuation proposals, which were not considered in any detail by the C-20, are listed below.

5. Commodity reserve currency. The SDR would be defined as equal to a specified basket of homogeneous storable commodities, and it would be issued or redeemed in exchange for that commodity basket (Hart, Kaldor, Tinbergen, 1964).

6. Constant purchasing power. An alternative way of giving the SDR a constant real value, although a real value defined principally in terms of manufactures rather than primary commodities, would be to define the SDR as equal to a basket of currencies in which the quantity q_i of each currency increased in proportion to the rate of inflation in country i (Peters et al., 1975). Unlike the former case, this would not require commodity backing with its attendant costs and thus incentives to invest credit substitutes.

7. Mixed currency gold basket. It has been suggested that it would be possible to extend the standard basket to include standardized commodities with well-defined market prices; in practice, that the

basket should include a quantity q_0 of gold as well as the quantities q_i of n currencies. This would not require transactions in gold (or gold backing) so long as there were no intention of trying to stabilize the SDR price of gold (Legarda, 1980).

8. A logarithmic basket. Instead of the arithmetic averaging of exchange rates involved in equation (1), and thus in all of the basket formulae discussed above, it has been suggested that there would be significant advantages in averaging by the geometric mean (GM). This would amount to determining the logarithm of the SDR value by a basket of logarithms of exchange rates, hence the name of this proposal (which is due to Brodsky, 1980). In mathematical terms, equation (1) would be replaced by

$$(3) \quad v_j = \prod_{i=1}^n e_{ij}^{w_i} \quad \text{or} \quad \ln v_j = \sum_{i=1}^n w_i \ln e_{ij}.$$

III. Criteria for choice of valuation technique

The C-20 discussed this topic under four headings: provision of a numéraire, ability to satisfy the equal value principle, stability of the value of the SDR, and robustness. I propose to treat the second of these criteria as an aspect of the fourth, and to add three others that have subsequently emerged as important: predictability of yield, understandability and market acceptability. I consider the matter primarily from the viewpoint of a 'representative country', this being taken to be one that wishes to peg rather than to float, that is too small to have any prospect that its currency will be included in the basket, that has a broadly typical composition of trade, and a near average rate of inflation. The conclusion contains a discussion of the implications of recognizing that the representative country is an abstraction.

1. Provision of numéraire. Throughout the C-20 it was taken for granted that it would be desirable for countries to express their par values (if they had any) in terms of the SDR. Par values were thought of, however, simply as a way of defining parities (which are central rates between two currencies); given that intervention would be in currencies, parities are what establish intervention points. It then emerged that the standard basket (and especially the asymmetrical basket) had a distressing feature, in that a revaluation by one of the basket currencies other than the intervention currency would cause the basket SDR to appreciate in terms of all other currencies, including our representative currency and its intervention currency. It was taken for granted that it would be inappropriate to change par values and thus intervention points because a third currency was revalued or devalued. Thus one had the problem of 'inconsistency' between the transactions value of the SDR, which would alter, and the par value in terms of the SDR, which would not. Various solutions to this problem were proposed, such as ignoring it on the argument that it was entirely cosmetic, but a serious undercurrent of discomfort undoubtedly remained. In fact, this was probably a major reason why members of the IMF were initially so reluctant to adopt the standard basket.

In retrospect, it is surely clear that too much was being taken for granted. In particular, those countries that have adopted the SDR as a peg have done so precisely because of a desire to stabilize their effective exchange rates, plus the judgment that their trade composition was sufficiently close to the composition of the SDR to make the latter a sensible peg for that purpose. That is, countries that peg to the SDR do so because they believe that the revaluation of a basket currency in terms of their intervention currency should lead to an adjustment of their intervention points in terms of their intervention currency, in the interest of stabilizing their effective exchange rate (EER). In other words, the basket SDR provides the natural numéraire (peg) for the representative non-basket currency; and using it as such would avoid any problem of inconsistency between par values and transactions values. It is only for the basket currencies that that problem would arise; the simplest solution to it would be to define the central rates of the basket currencies directly in terms of one another rather than in terms of the SDR, should the basket currencies ever decide to return to a par value system.

Should the SDR emerge as a traded asset which could be used in intervention, a representative non-basket currency would be able to establish its intervention points directly in the SDR and maintain its EER approximately constant by keeping those intervention points unchanged. (Unless and until the SDR becomes usable as an intervention currency, pegging to the SDR will continue to require that intervention points in terms of the intervention currency be adjusted to neutralize changes in the SDR/intervention currency rate.) However, this is true only so long as the SDR is defined as a standard basket. If it were defined as an adjustable basket or an abstract SDR in a par value system, then a tendency for devaluations to exceed (fall short of) revaluations among the currencies in the basket would impose a need to devalue (revalue) in order to neutralize the net appreciation (depreciation) that would otherwise occur. If the value of an 'abstract SDR' were being determined in the market, then a strengthening (weakening) of the SDR against currencies in general would create a need to devalue (revalue) to maintain the EER constant. The asymmetrical basket would have a systematic tendency (of unsystematic strength) to appreciate against currencies in general over time, and would therefore impose the need for periodic devaluations in order to avoid mounting net appreciation of the EER. A commodity reserve SDR would tend to appreciate against currencies in general, and thus to impose a need for devaluation on the representative currency, for two distinct types of reasons: (a) because of secular inflation, and (b) because of a cyclical boom raising the prices of primary commodities relative to those of manufactures. A constant purchasing power SDR would be subject to the first but not the second of these effects. A mixed currency-gold basket would appreciate (depreciate) against currencies in general, causing a need to devalue (revalue) to maintain the EER constant, whenever the gold price rose (fell). In short, the standard basket offers an appropriate numéraire, while any of the alternative formulae might pose a need for par value changes simply in order to maintain the EER constant despite the absence (by hypothesis) of any abnormal national behaviour.

2. Stability. Any discussion of the need to make the SDR stable has to start with the question: stable in terms of what? Given that any definition will ensure that the SDR is stable in terms of itself and other things that remain stable in terms of it, the only three answers that I can think of are: goods, foreign currencies in general, or one's domestic currency.

Stability in terms of primary products would be secured by a commodity reserve SDR, stability in terms of a basket of goods produced by the basket-currency countries would be secured by the constant purchasing power SDR, and stability in terms of the commodity gold would be secured by a currency-gold basket from which the currencies were omitted. Stability in terms of the basket currencies in general would be secured by the standard basket. Stability in terms of a country's domestic currency would be provided by any solution so long as one were pegging to the SDR and one's currency were not in the basket, but only by the adjustable basket or the abstract SDR if one were in the basket and maintaining an unchanged peg. Those are facts. The only debatable question is which is the most relevant form of stability.

A monetary unit with constant purchasing power has the obvious attractions of providing a good unit of account and store of value. The constant purchasing power SDR would, however, involve indexing the SDR part of the world reserve stock; to the extent that there is any element of validity in the international quantity theory, this would tend to make the world price level indeterminate. A commodity reserve SDR would not be subject to that objection, because inflation would induce stabilizing commodity sales and reserve reductions rather than a destabilizing write-up in the nominal value of reserves. However, the form of stability it offers is less appealing, since it is based on only a limited range of commodities. A gold-based SDR offers an even less compelling concept of stability. (Whether or not it were subject to the objection of undermining determinacy of the price level would depend on whether or not the gold price were to be stabilized through an obligation to transact in gold at the fixed price.) While there are undoubtedly certain elements of logic in versions of an SDR with a constant real value, all these solutions also confront serious objections, and it appears that in consequence there is little interest in anything on these lines in official circles.

Although reserves are ultimately significant because of the command they give over goods, they are used in the first instance to buy foreign currencies. If a definition in terms of stability over goods is ruled out, then stability over foreign currencies is the natural alternative. The standard basket achieves this directly, by definition. Other definitions, notably the adjustable basket and the abstract SDR, may approximate stability in this sense, but whether or not they do so would depend upon the happenchance of the balance between revaluations and devaluations rather than being something that could be relied on ex ante.

Stability in terms of one's domestic currency would be achieved by any definition for non-basket currencies that maintained a constant peg

to the SDR. However, a basket currency would have its SDR value changed as a result of a devaluation or revaluation of another basket currency, under the standard basket. Worrying about changes in the domestic currency value of foreign assets is the conservative central banker's form of money illusion. It is not obvious that it deserves to be taken more seriously than any other form of the phenomenon.

3. Yield. The yield on the SDR in terms of any currency is equal to the own interest rate on the SDR plus the rate of depreciation of the currency in terms of the SDR. An SDR that is to function successfully as a market-related asset needs to carry a yield which is competitive with that on major reserve and trading currencies. The yields on these are, of course, normally competitive with one another because of interest arbitrage. Unless and until the SDR can rely on a market-determined SDR interest rate similarly moulded by interest arbitrage, it is necessary to seek a formula that the Fund can calculate ex post which will ensure that ex ante there is no incentive to shift in or out of the SDR. An SDR interest rate equal to the weighted average of the interest rates on the currencies in the basket, with the same weights as those currencies have in the basket, has this property in the case of the standard basket. That is, if foresight were perfect and interest parity held, an investor would have no preference between holding an SDR valued as a standard basket and carrying a weighted-average interest rate, versus holding any of the constituent currencies or a combination of them. This is not true with any alternative formula. For example, under the adjustable basket, an anticipated realignment of the currencies in the basket would reduce the yield on the SDR relative to that on all currencies if a balance of revaluations over devaluations were in prospect, and the SDR interest rate were calculated as a weighted average of the interest rates of the currencies in the basket.

4. Robustness. This term was used in the C-20 discussions to refer to the ability of a method of valuation to give an unambiguous solution for the value of the SDR in terms of any currency irrespective of the functioning or malfunctioning of the rest of the international monetary system. A non-robust method is one that will work only if there is a functioning par value system, or one that will give different answers for the value of an SDR depending on who is counted as having broken the rules 1/ or how the calculation is made. 2/ This eminently practical criterion was decisive in gaining acceptance of the standard basket in 1974. Subsequent events have suggested that its importance was hardly exaggerated. The criterion suggests ruling out all methods that depend on a functioning par value system, i.e. the adjustable basket, the asymmetrical basket, and, at least until the SDR becomes an actively traded asset whose price could be determined in the market, the abstract SDR.

It is also of some interest to turn the question around and ask whether a standard basket would be in any way incompatible with future reform designed to restore a comprehensive par value system. I can see no reason for any such assertion. On the contrary, one could think of membership of the basket as defining the natural domain of a multi-

currency intervention system, inside which exchange-rate obligations would be defined in terms of a parity grid and defended either by transactions in other basket currencies or by transactions in SDRs, and outside which all pegs would be defined in and all intervention undertaken in SDRs.

5. Understandability. The question at issue here is how easy it is for the interested public to understand what an SDR is and how its value is determined. My own view is that either a standard basket or an abstract SDR are perfectly straightforward concepts which any intelligent person can be expected to grasp without trouble, but that the adjustable and asymmetrical baskets are somewhat more complex in view of their combination of elements from the two 'pure' systems. However, this may be a subjective matter, since I have seen the view expressed that the adjustable basket is easier to understand than the standard basket. It is, however, clear that the logarithmic basket would be at a disadvantage in this respect.

6. Market acceptability. Given the tacit decision that the SDR will have to win its place in the world by out-competing alternative assets, it is important that it be designed as an asset that is attractive to the private market. This requires, in part, that the asset have a value that is predictable in terms of other assets, yet which behaves differently from all of them. The natural characteristic to seek to bestow is that of stability in some relevant sense: this takes one back to the discussion of section III.2 above. Stability in terms of a basket of currencies appears at least as natural a concept for the private market as for the public sector. A second aspect that seems to be important in winning market acceptance of an asset is the ease with which the market can cover open positions. Once again, this would be simple for a standard basket consisting entirely of actively traded currencies, but it would not be feasible for any of the other approaches except the mixed currency-gold basket. In particular, it would not be possible for the abstract SDR.

The conclusion I draw from the analysis of this section is that there is a remarkably strong case, based on a series of distinct considerations, which point with rare unanimity toward the desirability of maintaining a definition of the SDR based on the standard basket. This case would be strong even if it were intended to attempt to develop the SDR as an exclusively official asset with rules rather than market incentives to sustain its position. Given that the only hope of establishing the SDR as the principal reserve asset lies in developing it as a market-oriented asset capable of out-competing national currencies, the case for preserving and entrenching a definition in terms of the standard basket is overwhelming.

IV. The size of the basket

A decision to opt for the maintenance of the standard basket still leaves some important questions open. The first such question is that

of the size of the basket. This can be discussed under the same headings as were used in the previous section. A second question, which I shall not go into here, concerns the distribution of weights between the component currencies. It is implicit in some of the arguments in the paper that these should be in proportion to the use of a currency in invoicing trade, which probably means that the weights in the five-currency basket are broadly suitable, though perhaps with some tendency for the dollar to be over-weighted.

From the standpoint of providing a satisfactory numéraire, the basket should be large enough to ensure that a constant peg implies reasonable constancy of the EER. The five largest exporters account for close to 50 per cent of the value of exports of all Fund members ^{3/}, and a larger proportion of the exports of manufactures, for which the EER concept is most relevant. Adding more currencies to the basket would increase the certainty that a constant SDR peg would preserve a constant EER, although it would not necessarily increase actual constancy, inasmuch as the marginal currencies might otherwise themselves preserve a constant SDR peg. The fewer currencies there are in the basket, the fewer there would be who could not use the SDR as a peg without raising the 'inconsistency' issue. My own judgment is that these factors point to a smallish basket, of at least five and at most nine currencies.

The criterion of stability over currencies in general points toward a largish basket; indeed, this was perhaps the principal factor in the choice of a 16-currency basket in 1964. However, that case is weakened to the extent that the marginal currencies themselves choose to peg to the basket SDR. Moreover, there is little point in including currencies which are not significantly used for denominating the exports of the countries concerned, as was the case for two or three of the currencies in the 16-currency basket. My judgment would therefore be that this factor now points to something like a nine-currency basket.

The yield criterion indicates the need to have the same currencies (with the same weights) determining valuation and interest rate. Even with the 16-currency basket, however, the interest rate was determined on the basis of only the five major currencies, because of the difficulty of finding representative, competitive, comparable interest rates on many of the other currencies. This factor therefore points towards a five-currency basket in the interest of standardization.

Robustness suggests the desirability of restricting the basket to currencies that one can be reasonably certain will remain convertible; anything up to nine currencies would seem to satisfy this condition. So far as consistency with a restored par value system is concerned, it was suggested that the basket should be coterminous with the currencies in a multi-currency intervention system; efficiency considerations suggest the desirability of limiting the currencies in such a system to no more than five or six.

Smaller baskets are presumably more understandable than large ones, but the difference is surely marginal.

It seems clear that small baskets have greater market acceptability than large ones. This may be in part because the computational problems are eased, but the main factor seems to be the greater ease of covering open positions.

I would conclude from the above that there is a very strong case for reducing the size of the basket to no more than nine currencies, and a reasonably convincing case for going all the way to the five-currency basket. The analytical case happens to be reinforced by political considerations. In particular, there is always a danger that the marginal excluded country will feel that its national pride has been offended. The five-currency basket not only has the advantage that there is a relatively large gap between the fifth and sixth countries, but also that it is not absolutely clear which country occupies sixth place (Canada or Italy). While the arguments in favour of a five-currency basket are not as compelling as those in favour of a standard basket rather than some other form, five seems a good number to support.

V. Conventional v. logarithmic baskets

Equation (1) shows that the value of the SDR as determined by the conventional form of the standard basket is a weighted arithmetic mean (AM) of the exchange rates of the basket currencies. The alternative with which this will now be compared is the weighted geometric mean (GM) of the exchange rates of the basket currencies, as shown in equation (3).

The main argument in favour of using the GM is mathematical. With an AM, the weights of the currencies that appreciate increase over time, while correspondingly the weights of currencies that depreciate decrease over time. If one wishes to avoid cumulative changes in the weights of the various currencies, it is necessary to make periodic adjustments to the quantities q_i of the various currencies in the basket. An adjustment of just this type was in fact made in the composition of the SDR basket on 30 June 1978; it involved a reduction in the weight of the deutschmark and yen of the order of 20 per cent (Brodsky, 1980, p.18), which presumably introduced a significant discontinuity in the expected rate of appreciation (or 'strength') of the SDR.

When a GM is used, weights remain constant and thus there is no need for such revisions in the composition of the SDR basket, with the additional degree of arbitrariness that they bring. This would presumably increase the attractiveness of the SDR as a numéraire, and as a measure of stability in terms of currencies in general. Furthermore, the equality of yield referred to in section III.3 is strictly valid only if the SDR and the average interest rate are defined as GMs.

It is undoubtedly true, however, that a logarithmic basket is less easily understandable than the conventional form. One could no doubt rely on bankers and others with a direct financial interest to acquire

the necessary understanding quickly (their computers could certainly be programmed to help them with no trouble at all), but the point may be of some significance in so far as a full understanding by politicians, journalists, and the general public is important. It may be, however, that a vague idea that the SDR is a basket with a special mathematical form would be sufficient to satisfy their need to understand.

The question of the impact on market acceptability is an interesting one. The central point is that the market cannot put together a portfolio which is precisely equivalent to a logarithmic basket in the way that it can replicate a standard basket. This implies that it would not be possible to cover an open SDR position perfectly through pure hedging operations as would be possible with the five-currency standard basket. Presumably this would be a disadvantage in getting the SDR launched as a market asset. However, it might also have the effect of giving an element of autonomy to the SDR market, once this were launched, that would otherwise be lacking. It is, after all, often said that there is no point in holding SDRs rather than the component currencies when the SDR portfolio can be replicated so easily. The impossibility of perfect replication, due to the use of a GM rather than an AM, might be just the element of friction needed to give the SDR a life of its own.

My still slightly tentative conclusion is that it would be desirable to change the form of the SDR basket to the geometric, or logarithmic, basis.

V. Concluding remarks

The above arguments in favour of a standard logarithmic basket have been developed from the standpoint of a 'representative country'. This was defined as one that wishes to peg rather than to float, that does not have its currency in the SDR basket, that has a typical composition of trade, and that has a near-average rate of inflation. The best way of testing whether this is an appropriate standpoint to adopt is to inquire into the implications of relaxing those assumptions.

A country that wishes to float rather than to peg has no need of a numéraire, so the first criterion is irrelevant to it. However, it can still be expected to welcome a reserve asset that is stable in some relevant sense, that has a competitive yield, etc. The case for the standard basket is therefore slightly less overwhelming, but still strong.

Consider next the case of a country whose currency is in the SDR basket. It is again the numéraire function that is affected. As already mentioned in section III.1, the standard basket would raise the problem of 'inconsistency' between par values and transactions values for those currencies if they were to define their par values in terms of the SDR. It was suggested that the natural solution for those countries

(if they wished to peg rather than to float) would be to define their central rates directly in terms of one another rather than in terms of some general numéraire. The substantive economic implications of this are: (a) that the basket currencies would be unable to secure a collective exchange rate change versus the rest of the world at their own initiative, and (b) that when a basket currency revalued or devalued, it would move more in terms of its fellow basket currencies than in terms of non-basket currencies. These are in fact the institutional forms that the asymmetry resulting from the 'n-1 problem' would take in a par value system using the standard basket as numéraire. The only way of abolishing the asymmetry entirely would be to adopt the abstract SDR, thus giving an nth. independent exchange rate. The costs of such a step - in terms of reducing the usefulness of the SDR as a numéraire for non-basket currencies, removing the assurance of stability in terms of currencies in general, introducing a random element into the yield on the SDR, undermining the robustness of the valuation method, and threatening the SDR's market acceptability - surely outweigh the benefit of eliminating the last remnants of an asymmetry that has already been much attenuated. It is, after all, scarcely conceivable that the United States, the Federal Republic of Germany, Japan, France, and the United Kingdom are going to face a need to devalue (revalue) simultaneously in order to increase (reduce) their current balance with the rest of the world. On the contrary, there would seem to be considerable appeal in a system whereby the countries with sufficient weight in the world economy to make the determination of their exchange rates inherently a general equilibrium question determine their rates directly in terms of one another, while the remainder determine their rates on a partial equilibrium basis vis-à-vis the system as a whole.

Thirdly, let us consider the case of a country that does not have a geographical composition of trade that matches ⁴/ the composition of the SDR basket. Such a country will not be able to stabilize its EER by pegging to a basket SDR. If each country regards exact stabilization of its EER as an over-riding priority, then most or even all would presumably be better advised to peg to a tailor-made basket reflecting their individual trade composition rather than to the SDR. Paradoxically, if they do that, it is entirely possible that most or even all of them would end up with less stability of the EER than if they are a little less perfectionist and therefore settle for use of the SDR. The reason is that each additional country that pegs to the SDR thereby eliminates capricious variations between its currency and the SDR, and thus makes the SDR a better peg for all other currencies. SDR-pegging thus has something of the nature of a public good. In view of the ability of an SDR peg to provide stability between third currencies and, after perusing some of the results of Brodsky and Sampson (UNCTAD, Geneva), on the implications of different pegs for stability of EERs, my impression is that a number of Caribbean countries might be well-advised to continue pegging to the dollar, some European countries to peg to the ECU and some francophone African countries to the French franc, but that most other countries would benefit both themselves and their trading partners by pegging to the (basket) SDR.

An atypical trade composition will also tend to give a country an interest in an SDR that is stable in terms of a different currency

average from that which is appropriate for a country with a typical trade composition. There is no way in which these different preferences can be accommodated simultaneously through the design of a single asset, and it seems rather obvious that it should be the 'representative' country, in some sense, that is accommodated. In any case, discrepancies between a country's contingent liabilities and the SDR part of its reserve portfolio are of minimal significance so long as countries are at liberty to hold their reserves in currency form as well, since they can manipulate the currency composition of their reserves to match their particular trade pattern.

Consider finally the case of a country with an atypical rate of inflation. It has sometimes been assumed (e.g., Lipschitz and Sundararajan, 1980) that part of the criterion for a basket peg should be that it gives an average inflation rate close to that of the pegging country, so as to avoid the need for changes in the peg. This assumption is a hangover from the days of Bretton Woods orthodoxy when changes in pegs were regarded as per se undesirable. It is simple (and not unreasonably demand on statistical and forecasting expertise - inflation rates have high serial correlation) to neutralize inflation differentials through crawling changes in the peg. Hence I would argue that atypicality of the inflation rate is totally irrelevant to the choice of a peg, and indeed to the other criteria for choosing an SDR valuation technique.

The implications of considering 'non-representative' currencies are therefore rather modest. The overwhelming case, that emerged from earlier sections, for defining the SDR as a standard basket with composition geared to some sort of global average remains unscathed.

FOOTNOTES

1. The classic example occurred in mid-1973, when both the United States and the European 'snake' regarded themselves as observing their par values, while no-one defended the rate between the two, which consequently drifted over 10 per cent away from parity. The price at which the SDR changed hands could thus vary by over 10 per cent depending on who was involved in the transaction.
2. The 'equal value principle' provided for transactions to be undertaken at rates based on market rates. There was some suggestion in the C-20 that this should be abandoned in favour of a return to rates linked directly to par values, which would have meant that one received or paid more or less (measured in terms of a common currency) for one's SDRs, depending on what currency was chosen as the transactions currency and where it stood in relation to its parity.
3. As against perhaps 65 to 70 per cent for the nine largest, and approximately 75 to 80 per cent for the 16 largest.
4. There is some current discussion in the literature on the subject as to how the term 'matches' should be interpreted. Essentially the questions are: should the weights in optimal basket pegs be based simply on bilateral trade flows, or should they be weighted by elasticity estimates? Should they be based on the origin/destination of trade, or on the currency of contract denomination, and should they attempt to make allowance for covariances between price changes? See Flanders and Helpman (1979), Lipschitz (1979), and Lipschitz and Sundararajan (1980). My argument below may be regarded as a plea for suppressing these refinements.

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THE IMPACT OF THE EXCHANGE RATE SYSTEM ON THE
DEVELOPING COUNTRIES

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PREFACE

Many people have had a hand in the preparation of this report. The project was originally conceived and organized by Sidney Dell. The authors of several country studies which were prepared in connexion with this project have contributed significantly to its content: Peter Ady, Edmar Bacha, Charles Harvey, Alberto Jimenez de Lucio, V.R. Panchamukhi, Delisle Worrell. The UNCTAD secretariat has generously given substantive help in preparing the report. Members of the staff of the IMF provided valuable information and comments. Very useful comments on earlier draft material were made by Edmar Bacha, Alec Chrystal, Carlos Diaz-Alejandro, Sidney Dell, Chandra Hardy, Roger Lawrence, Lance Taylor and John Williamson. Research assistance was provided ably by Xolile Guma and Damas Mbogoro. Above, all David Brodsky and Gary Sampson of the UNCTAD secretariat, who undertook the underlying cross-country statistical analysis and contributed important drafts of parts of the text, should share the credit for such originality as this report may possess. None of the aforementioned is to be implicated, however, in its contents. The responsibility for this report now rests exclusively with me.

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I. SUMMARY AND RECOMMENDATIONS

1. With the Second Amendment to the Articles of Agreement of the International Monetary Fund the adjustable peg system of exchange rates, which had governed international monetary affairs since the Second World War, was formally abandoned. Since March 1973 an exchange rate regime of managed flexibility among major currencies has been operative. All of the macro-economic consequences of more flexible exchange rates in the industrialized countries are still not a matter of general agreement. Although many assert that the new exchange rate regime has somewhat eased medium- to long-run balance-of-payments adjustment among the major industrialized countries, even this is difficult to establish conclusively.

2. Whatever the possible beneficial aspects of the present exchange rate system, it has also been characterized by some major new, and to some extent unforeseen, problems. In this study, attention is confined to the effects of the floating exchange rate system, on the assumption that global macro-economic developments and longer-run currency realignments were not significantly affected one way or the other by it. The prime concern is rather with the short-run and medium-term exchange rate instability and uncertainty which have come to characterize the international monetary system. While a number of national case studies were undertaken as background for this study in order to shed light upon the effects of the exchange rate regime on individual developing countries, the principal object of this study is to make an assessment of the effects of the exchange rate system as a whole, not to assess the appropriate policies for particular countries within the system.

3. The most troublesome feature of the post-1973 exchange rate regime is unquestionably the greatly increased turbulence of foreign exchange markets. There has been a significant increase in short-term and medium-run nominal and real exchange rate instability in the industrialized countries. Between June 1973 and February 1979, the average absolute percentage change in pound, franc and mark rates vis-à-vis the United States dollar exceeded 2 per cent per month, which represented more than twice the average rate of monthly change in wholesale and consumer price levels, and much larger proportions of the monthly changes in relative price levels. This instability has been erratic and unpredictable.

4. Flexible exchange rates, it was thought, ought to permit quicker exchange rate responses to international inconsistencies in inflation rates, as well as structural changes of various kinds. Deviations from purchasing power parity, however, have been significantly greater in the floating period than in the 1957-1972 period of adjustable pegs, and they have often persisted over longer periods than most people expected.

5. These large short-term fluctuations - far beyond the requirements for current account adjustment, and reflecting, above all, the continuing importance of large short-term capital flows responding to

changing expectations as to political events, inflation rates, exchange controls, and ultimately exchange rates themselves - have dampened enthusiasm for the new regime's possible accomplishments. Contrary to some expectations, these fluctuations have not gradually declined as the markets became more accustomed to the new, more flexible exchange rate regime.

6. Although the foreign-exchange markets now appear to be just as inevitably turbulent as other asset markets, such as those for stocks or commodities, there are not effective equivalents in international currency markets for the regulatory agencies which oversee particular national stock or commodity exchanges, limiting the degree of price change permitted within given periods, suspending trade for particular items in unusual circumstances, and policing certain "rules of the game". Governments can and do intervene in currency markets, but there are no established rules for their conduct and there is potential for different governments to act at cross-purposes. While IMF has been authorized to exercise surveillance over exchange rates, it has little policing power except in respect of its poorer members.

7. Disruptions and instability in underlying economic and financial conditions can never, of course, be totally eliminated; and the post-1973 period has been one of considerable international economic disorder. But "orderliness" of markets can nevertheless be achieved with varying degrees of success. On the face of it, there has been little success in attaining the internationally agreed objective of avoiding erratic and excessive exchange rate fluctuations, or at least moderating them when they are not the product of underlying economic conditions.

A. The record of increased exchange-rate instability

8. This study analyses the degree of month-to-month exchange rate instability in recent periods for every currency for which there are data compiled by IMF. Comparisons are made, in particular, between the experience in two periods: January 1966 to August 1971 (period 1), and April 1973 to June 1979 (period 3). */

9. Variability is obviously not precisely the same as unpredictability. Demonstrating that variability of exchange rates has increased during the period of the float does not constitute proof positive that foreign-exchange risk has increased unless it can also be shown that predictability has thereby declined and uncertainty increased. Attempts to measure uncertainty by the success with which forward exchange rates "predict" future spot exchange rates invariably indicate increased uncertainty in the floating-rate period. It is therefore presumed that the degree of instability is paralleled by a degree of uncertainty.

*/ For an explanation of periods 1, 2 and 3, see paragraph 62 below.

10. In a flexible exchange rate regime it is no longer so clear what the exchange rate is; for this reason, effective exchange rates have been calculated for the analysis. All measures of effective exchange rates are constructed as weighted-averages of individual bilateral exchange-rate indices. Controversy surrounding the appropriate means of constructing effective exchange-rate indices has related primarily to the choice of appropriate weights. For most developing countries, sufficient information does not yet exist for calculating any but bilateral trade-weighted effective exchange-rate indices. Hence, despite their possible disadvantages, for the purposes of this study, in which coverage is as comprehensive as possible, the effective exchange rates used are of the trade-weighted variety.

11. To some extent, exchange rate fluctuations may merely offset fluctuations in domestic prices, in which case nominal exchange rate instability overstates the resulting price instability. If so, it is the relative instability of real - i.e. relative price deflated - rather than nominal exchange rates which should be at issue in the comparison of the degree of exchange risk faced by traders under alternative exchange rate regimes. Real effective exchange rates have therefore also been calculated for as many countries as possible.

12. There is no necessary correspondence between the effective exchange rate for the economy as a whole and that which is "effective" for any particular firm or sector. To the extent that the origin of their imports and/or the destination of their exports differ from those of the entire country, individual firms or industries may experience effective exchange rate trends and fluctuations quite different from those of the economy as a whole and from one another. Individual producers and traders, particularly the smallest ones, are likely to be both different from and much less diversified in their activities and in the direction of their trade than the country as a whole; so that the incidence of increased instability and uncertainty will be different and, in some cases, may be proportionately much larger for them than would be suggested by aggregative national statistics.

13. Two basic measures of instability have been employed in this analysis. The first is the standard deviation of monthly percentage change; this is the measure which has been employed by IMF in earlier analyses. The second is the standard error from an exponential regression of monthly observations over time. Whether monetary authorities are or should be more concerned with month-to-month changes regardless of trend, or deviations from trend, regardless of month-to-month changes, is entirely a matter of judgment.

14. The present analysis indicates that the overwhelming majority of both developing and developed countries experienced increases in effective exchange-rate instability between period 1 and period 3. Of 124 developing countries for which there are data, 103 experienced increases in instability as measured by the IMF measure, and 109 did so in terms of the standard error measure. Both instability measures registered increases in 31 out of 37 of the poorest (low income)

countries as defined in the UNCTAD Handbook of International Trade and Development Statistics, 1979 (hereinafter referred to as UNCTAD Handbook). In many cases, between periods 1 and 3, measured instability rose three, four and five-fold.

15. Instability of real effective exchange rates, like that of nominal effective exchange rates, has increased between periods 1 and 3 in the vast majority of countries, both developing and developed. When measured by the IMF measure, 48 out of 69 developing countries for which there are data showed increases; measured in terms of the standard error measure, 53 of them did so. Of the 21 lowest income countries for which there are data, 14 or 15, depending on the stability measure employed, experienced increases.

16. While it is sometimes suggested that nominal exchange-rate instability exaggerates the "true" instability in real exchange rates, these data show that not only has real instability risen along with nominal instability between periods 1 and 3 but that real instability has also been greater than nominal instability in more countries than not during the 1973-1979 period. In developing countries, real effective exchange-rate instability is typically higher (68 or 83 cases out of 88, depending on the measure); in the developed countries whether this is the case depends upon which measure of instability is employed.

17. To some degree, leads and lags in the relationship between price levels and exchange rates could account for some of these results. Data imperfections may also somewhat cloud the interpretation of these data. Still, the fact that real effective exchange rates, as measured here, are so frequently more unstable than nominal ones in developing countries suggests that the "orthodox" assumptions about the relationship between relative price levels and nominal exchange rates cannot easily be transferred to the context of developing countries.

18. Under the terms of the Second Amendment to the Articles of Agreement of the IMF, member countries have considerable freedom as to the means they employ for determining the value of their currencies. Of the 139 currencies of member countries listed by IMF at the end of June 1980, 58 were pegged to other currencies, 36 were pegged to baskets of currencies (15 of which were pegged to the SDR), and 45 had other exchange-rate regimes, e.g. floating or altering according to "a set of indicators".

19. Only 24 of the 114 developing countries listed did not maintain some type of peg. Economic circumstances in developing countries are generally considered to be unsuitable for the effective operation of floating exchange rates for their own currencies. Their capital markets are usually thin and frequently inefficient; their foreign-exchange markets are also often very thin and the supporting infrastructure not well developed, although this is sometimes the product of governmental foreign-exchange controls; and their import demand and export supplies

are believed frequently to be quite inelastic with respect to prices. For these and other reasons, floating would lead to excessive and probably ineffective fluctuations.

20. In a world of floating exchange rates, to peg to one currency (or basket of currencies) is at the same time to float vis-à-vis other currencies. In a real sense, then, all countries are floating - even those which have pegged their exchange rates. For countries that maintain a peg to a single currency (or fixed basket of currencies), the effective exchange rate can change not only through an adjustment of the level of the domestic currency vis-à-vis the peg currency but also as a consequence of changes in the value of the peg currency (or basket) vis-à-vis other currencies of countries with which trade is conducted. Obviously, for countries retaining a totally fixed peg to one currency (or basket) these "third currency" fluctuations are the only possible source of instability in their effective exchange rates. Fluctuations in the value of the peg currency vis-à-vis the currencies of other trading partners are matters beyond the control of national monetary authorities. Worse, they are the product of influences upon the balance-of-payments position of the peg-currency country, and these may have little connexion with those relevant to the payments positions of the countries retaining this particular peg. Instability in effective exchange rates caused by these peg currency fluctuations is clearly "externally" created and should be differentiated from other sources of exchange-rate instability.

21. For countries that have pegged their currencies, it is possible to decompose the measured instability of effective exchange rates into their "externally created" and "other" components, together with a third term which describes the degree to which variations in the two independent sources of instability are themselves correlated with one another. The degree to which a country's effective exchange-rate instability is attributed to "external" factors is in part the product of its own exchange-rate policy. If it pegs the value of its own currency to another currency which is relatively stable vis-à-vis the currencies of other major trading partners, the "external" influence will be measured as lower than if it pegs to a more unstable currency. In general, there exists a peg which will minimize such "externally" caused fluctuations in effective exchange rates - and the particular currency or basket of currencies which will achieve this objective is unique to each country and time period.

22. The decomposition exercise demonstrates that in the vast majority (73 out of 81) of countries that maintained a peg vis-à-vis another currency or currency basket, "externally caused" instability in nominal exchange rates increased between period 1 and period 3; and these increases were frequently of substantial relative size. It is also possible to assess the increase in "external" instability between period 1 and period 3 by considering what would have happened had each country selected that currency peg or practice which would have minimized "externally caused" nominal or real effective exchange-rate instability. Even in this hypothetical best possible world, 134 of the 149 currencies (109 of 124 developing countries) for which there are data would have

experienced increased nominal effective exchange-rate instability between periods 1 and 3; of 69 developing countries for which there are data, 62 would have experienced increases in real effective exchange-rate instability.

23. Most developing countries' currencies experienced exchange rate stability, vis-à-vis the SDR or the United States dollar, which was within the range of experience of the major OECD countries. Thus the increased "externally created" instability of their currencies caused by the fluctuations among the major currencies cannot be assumed, except in a relatively few cases, to have been dwarfed by "other", and specifically internally generated, instabilities.

B. Effects of increased exchange-rate instability on developing countries

24. Fluctuations in effective exchange rates which are the product of instability of foreign currencies can obviously complicate macro-economic management in developing countries. If they are large enough, and if there are price or nominal wage ratchets operating, they may even generate more rapid domestic price inflation, and hence depreciation of the domestic currency vis-à-vis its peg currency and the possibility of further inflation in an upward spiral. But any such effects are difficult to verify, and there is no consensus as to their importance even in the developed countries where there have been attempts at doing so empirically. On other costs of exchange-rate instability, however, there is much wider agreement.

25. At the micro-level, increased variability of exchange rates, other things being equal, increases the risk involved in international trade and, through its effects upon domestic prices, in particular types of domestic production and consumption, notably tradeable goods and services. It might be argued that more flexible exchange rates, particularly in periods of crisis and extreme uncertainty, substitute for other impediments to the free flow of international trade - e.g. exchange controls, trade barriers, etc. - but this possibility is difficult to take seriously as a general description of likely alternative events throughout the floating period. Assuming some degree of risk aversion, there ought therefore to be some reallocative effects - diverting production away from exports with their increasingly uncertain prices, and towards non-traded products and, perhaps, import substitutes, prices for which are less influenced by these new uncertainties; and similarly diverting consumption away from imports and towards non-traded products and, perhaps, exportables.

26. The various devices which may be employed by international traders to cover themselves against foreign-exchange risk are, in any case, not without cost. Even when the increased short-term exchange risk of the post-1973 period is effectively covered, there still ought to be anti-trade effects arising from the increased risks. Even without risk aversion, increased instability of price muddies the signals upon which

efficient resource allocation must be based, and thus is likely to lower overall economic efficiency. There are thus clear social costs from the increased uncertainty of prices for traded or tradeable goods - taking the form of less efficient allocation, excess frictional costs, or the opportunity cost of the resources involved in the arrangement of cover against risk.

27. While it is not clear that the turbulence in foreign-exchange markets has in fact significantly affected international trade or investment in the industrialized countries, in the developing countries the presumptions as to the negative effects are much stronger.

28. How important increased exchange-rate risks are to particular transactors depends fundamentally upon the currencies in which their international trade is denominated. The international transactions of the developing countries are denominated in internationally acceptable currencies, only rarely in their own. Except in the cases where there is a rigid peg maintained with the currency in which trade is denominated or where real exchange rate stability is maintained, a much higher proportion of their nationals' transactions is therefore subject to exchange risk than is the case in industrialized countries where at least some trade, usually exports, is usually denominated in the home currency.

29. While one would expect disincentives to trade and the other possible costs of increased exchange-rate instability to be greater for smaller firms and smaller countries, this has not as yet been generally verified by empirical testing. Most tests of the effects of exchange-rate instability upon trade volume have been inconclusive. There do exist scattered findings, however, to the effect that instability in either real or nominal exchange rates has been correlated with reduced trade in a number of specific developing countries.

30. Other things being equal, one would expect trade patterns as well as trade levels to be influenced by the degree of exchange rate instability and uncertainty experienced in different directions of trade. Thus in a world of fluctuating exchange rates there should be a tendency for countries to trade more in currencies which are relatively stable vis-à-vis the home currency than in those which are not. There is potential for a cumulative self-reinforcing process: countries are motivated to peg their currencies to those of their principal trading partners, and, having done so, they are motivated to trade with these countries still further. When the major currencies float vis-à-vis one another, there can therefore be a tendency for Northern-based currency and trading blocs to gain strength, with all the attendant disadvantages. In recent years, however, a variety of other influences appear to have dominated exchange-rate instability as determinants of trade patterns, e.g. longer-term competitiveness, market access, credit availability, multinational firms' activity in trade, aid flows, national diversification objectives, and altered purchasing or marketing practices.

31. Increased short-term instability of exchange rates has created difficulties for the managers of foreign-exchange reserves and public debt in developing countries. Even in the more advanced of these countries, the necessary financial experience and expertise for effective portfolio management was frequently found to be lacking. In the smaller countries, these problems have been particularly serious. Scale diseconomies in the management function and the unfeasability or expense of acquiring up-to-the-minute information in these countries increase the difficulty of achieving effective managerial responses to short-term changes; and they are usually in any case particularly deficient in the relevant expertise.

32. Similar issues arise in respect of the problems of debt management. The currency composition of debt is much more likely to be the product of chance than is the case with reserves. While much of the developing countries' debt is fairly long term, the servicing is ongoing and gives rise to recurrent short-term payments obligations; increases in short-run exchange rate instability therefore imply increased risks in this sphere just as in trade and reserves.

33. At present the foreign-exchange risk inherent in all external finance is forced almost exclusively on to the borrower. Bilateral lenders, with very few exceptions, lend in their own currencies; financial institutions, such as the World Bank and Eurocurrency banks, match assets to liabilities in each currency.

34. Except for the larger and more commercially creditworthy among them, the developing countries have very little control over the extent or precise character of that risk. The management of the risk is especially difficult for the smallest and least "creditworthy" countries - the majority of developing countries. For then, the currency composition of the external debt at any one time is given and cannot normally be altered; finance is not normally available to them to refinance external debt in different currencies. Nor can these countries normally choose which currencies to borrow except on a very long-term basis by their shifting of trade, aid and financial relationships. In addition, in relatively small countries, single externally-financed projects can be large enough to have a significant or even dominant effect on the country's external debt, so that if such a project is financed in one currency the country can be dangerously exposed to adverse movements in that currency.

35. There is a striking shortage of international, and sometimes even national, statistics on the currency composition of foreign debt and foreign debt service, implying a general lack of awareness of the problem. Private or multilateral facilities for avoidance or spreading of currency risk in external borrowing, let alone for refinancing inappropriate currency mixtures of debt, have only just begun to appear.

36. All in all, the new exchange-rate regime increases the need for rapid information acquisition and analysis, and places a premium upon

quick response and flexibility in production and trade. It therefore places those least endowed with these capacities at a new relative disadvantage - notably the poorer countries and smaller firms.

C. The management of exchange risk in developing countries

37. Increased instability and uncertainty as to the values of the major world currencies have thus created new risks and costs which are the product of external forces entirely outside the control of developing countries' national economic policy-makers. These externally-originating risks are additional to those major ones created by export commodity price fluctuations, changes in import prices, uncontrollable influences over domestic production, and the like, all of which undoubtedly remain the most important sources of "shock" and risk in the macro-economic management of the developing countries.

38. The provision of forward cover against foreign-exchange risk to private traders is likely to serve the national interest, both by "improving the signals" for private decision-making and by protecting the real value of the nation's foreign-exchange earnings. The majority of the developing countries, and particularly the smaller and poorer ones, still do not have forward facilities of any description. Even those that do often have very limited coverage.

39. The particular problems encountered by the weaker developing countries' governments and central banks in covering themselves against substantially increased short and medium-term exchange risk, and therefore in providing cover for their citizens, have not always been fully appreciated. Where there is a need to cover an exposed future (short term) position in particular national vehicle currencies, there is generally the possibility of resort either to forward markets, or to the spot markets in foreign exchange together with international borrowing and lending opportunities. This route is an easy one in the industrialized countries where the foreign-exchange and security markets are most developed and the foreign-exchange controls least limiting. For a number of reasons, however, developing countries are at a relatively disadvantageous position in respect of operations in this market. Bid-ask spreads which are generally believed to have risen since the world moved to floating exchange rates, and which rise further in times of particular turbulence, vary with the customer and with the maturity.

40. So does the cost of acquiring insurance against foreign-exchange risks through various bank-arranged insurance schemes. Small private firms and governments of small developing countries - i.e. those with the least creditworthiness, smallest transactions, least ancillary business prospects, and least market information - are those likely to incur the highest charges for protecting themselves against foreign-exchange risk. In developing countries' trade with developed countries, there are likely to be further costs because of the typically longer duration of the period between contract and delivery for which forward

cover is required. Spreads rise markedly with the length of the forward contract, and forward markets thin out dramatically for maturities beyond those (six months) typically required for the finance of intra-OECD trade. In short, financial markets have not provided the breadth or depth of forward facilities that their more enthusiastic supporters expected, and have imposed heavier costs upon developing countries than upon others concerned to protect themselves against increases in foreign-exchange risk.

41. The unit of account in international trade may be arranged so as to achieve a fairer distribution of exchange risks by such devices as contractual provision for price changes in response to subsequent exchange-rate changes, the splitting of the price into two (or more) separate currency components, the use of an agreed third vehicle currency, flexibility as to the date of payment, or the use of an artificial basket currency unit. While data on the prevalence of these arrangements are imperfect, such devices do not so far seem to have been of great relative significance in developing country trade.

42. There are some developing countries which are firmly within the dollar or franc monetary areas in the sense that most of their trade in both directions is denominated in one currency. For the majority of developing countries, however, export prices are fixed in terms of far fewer currencies, usually predominantly in dollars, than are their import prices. The pricing of their exports in terms of some composite unit of account which better reflects the structure of their payments obligations, commercial as well as financial, would certainly ease their problems with increased exchange risk.

43. Similar innovations in international financial accounting could ease some of the problems of exchange risk in developing countries' debt and reserve management. For instance, the World Bank has recently introduced an exchange risk pooling system to reduce what had previously been an arbitrary and capricious distribution of exchange risks among its borrowers. The new pooling system still does not address the problem of exchange risks associated with outstanding World Bank debt, although it might have done so. An obviously simpler means of spreading and even reducing risks for borrowers, and potentially reducing effective interest rates as well, would be the total conversion of the World Bank operations - both its borrowing and its lending - to an SDR basis. IMF accounts and lending are already denominated in SDRs. Similar comments apply, pari passu, to the activities and possibilities of the regional development banks: the Inter-American Development Bank plans to introduce a risk-pooling scheme similar to that of the World Bank, and the Asian Development Bank has also been studying the problem.

44. The limited and costly domestic and international facilities for forward cover for developing countries, and their limited bargaining capacity in international commercial and financial negotiations suggest that they would be disproportionate gainers from the use of suitable currency baskets for the denomination of commercial and financial contracts. Baskets will be particularly useful for the smaller

transactors who have the most difficulty acquiring a diversified portfolio. While the SDR is not the optimal basket for all developing countries, least of all those whose trading and financial connexions do not coincide with the weights within its particular basket, it is the leading candidate for increased international acceptability and use as a basket.

45. In the past two years or so there has been a re-emergence of interest in SDR-denominated contracts. Among the factors which may explain this are: continuing key currency instability and uncertainty, growing familiarity with the idea of currency baskets, and the development of computer technology for their handling, the attempt to develop a substitution account and the discussion of SDR-denominated assets related thereto, the emergence of the European currency unit and official efforts to promote its use, the 1977 repeal of United States legislation which inhibited United States banks in this sphere, and possibly, renewed oil surpluses with the renewed search for "acceptable" financial instruments for the handling of vast recycling needs. There are now at least 30 commercial banks in 12 financial centres offering SDR-denominated deposits as against only about half a dozen in mid-1978. The Bank for International Settlements also accepts increasing numbers of SDR-denominated deposits. IMF now records in its bi-monthly Survey the (average) interest rate on three month SDR-denominated deposits in European, North American and Japanese banks. After a lull in 1976-1977, composite currency units (European units of account and SDRs) have also been increasingly employed in international bond flotations in 1978-1979.

46. The oil-surplus countries are in a position, both in their own institutions and in their negotiations with private banks and inter-governmental financial institutions, to achieve major improvements in the way in which exchange risk is handled for developing countries, and ultimately for the rest of the world as well. They can do this by insisting that significant proportions of their assets, and therefore of the developing countries' liabilities, particularly those of the poorest and smallest, be denominated in SDRs. They can achieve this through direct developing-country placements with their own financial institutions, and in direct World Bank placements, and may thereby encourage World Bank bond marketing in SDRs in other markets as well.

47. At the same time, it would be helpful for the oil-exporting countries to denominate oil prices in a less unstable vehicle than the dollar. The decision to switch to SDR-denominated prices on the part of the OPEC countries would not only achieve the objective of stabilizing a little the price of energy both for producers and consumers, but would also accelerate the process of denominating more financial instruments in terms of SDRs. In other primary commodity markets, producers' associations might also be stimulated to act in a like manner. Similar changes in the denomination of developing countries' import contracts should also be sought wherever possible and where, as in the case of standardized products whose markets are competitive, offsetting price increases can be avoided. Developed countries could support such changes through the provision of SDR cover in their exporters' exchange risk insurance programmes.

D. Recommendations

48. This study of the impact of present exchange-rate systems has shown that, in developing as well as industrialized countries, there has been a significant increase in the short-term instability of effective exchange rates, both nominal and real, between the 1966-1971 and 1973-1979 periods; that in circumstances, typical of developing countries, in which countries have been pegged to an external standard, there has been an increase in exchange-rate instability attributable to "external" causes, i.e. fluctuations among the major currencies; and that the costs of increased exchange-rate instability have fallen disproportionately upon the developing countries, particularly the smaller and poorer ones. These findings have led to the following recommendations:

- (a) Renewed efforts to develop "an exchange rate regime which, while flexible, is capable of promoting adequate stability" (Group of Twenty-four, 1979, III, 2b) should be undertaken in the International Monetary Fund and other appropriate forums. The reduction of turbulence and disruptions in foreign-exchange markets would be in the interest of all countries but of particularly great value to the developing countries. Particular policy instruments which could be deployed for this purpose deserve more research attention.
- (b) The International Monetary Fund should undertake studies of the adequacy of existing means of covering against foreign-exchange risk, both at national and international levels, and in particular, seek to develop measures for the broadening and deepening of forward foreign-exchange markets.
- (c) The use of basket currencies in their own international transactions could reduce significantly the degree of foreign-exchange risk - particularly for those countries lacking the scale or the expertise, or both, to construct their own "portfolios" to achieve the same purpose - by reducing the degree of short-term instability in the value of the foreign exchange in which the developing countries must deal. It has long been the view of the developing countries that the SDR should become the principal source of international liquidity and the cornerstone of the international monetary system. Moves to increase the use of the SDR in international contracts, while avoiding any premia which might be associated with such contracts, will both alleviate some of the immediate problems of the present exchange-rate system and further the broader objectives of international monetary reform. For these reasons:
 - (i) The developing countries, and above all OPEC, should consider unilaterally denominating their export prices, and seeking to denominate more of their financial assets, in terms of SDRs;
 - (ii) They should press for increased SDR denomination in other transactions as well, e.g. in other trade contracts,

commercial bank lending and bond flotations. In this connexion, the industrialized countries should offer encouragement in their export promotion programmes for the use of SDRs in contracts with developing countries preferring this type of denomination;

- (iii) The World Bank and the regional development banks should be urged not only to convert to SDR-denominated borrowing and lending in the future, but also to refinance past lending in terms of SDRs at the borrower's option;
 - (iv) IMF should adopt a more activist role in stimulating the accounting use of SDRs - not only through technical assistance and information dissemination, but also through such devices as the provision or facilitation of SDR-denominated deposit, discounting and clearing facilities, and other supportive measures.
- (d) Because financial management capacity in many developing countries has not kept up with the increased complexity of foreign-exchange markets, technical co-operation among these countries and IMF support for it should be expanded. In particular, the development of better information systems and suitable "software" for better reserve and debt management, and the potential for the pooling of expertise and information or management systems among the smaller and poorer countries, are matters for detailed exploration.
- (e) The present study has uncovered evidence to suggest that many developing countries now pegging the value of their currencies to foreign national currencies might have reduced the degree of externally created effective exchange-rate instability by pegging to the SDR. The advantages of doing so should be carefully considered by individual developing countries through assessments more detailed than were possible here. The possible advantages of joint developing country pegs also deserve further study. If contracts are denominated in SDRs and exchange rates are also pegged to SDRs, exchange-rate instability experienced by private transactors will be measurably reduced.
- (f) Efforts should be made to compile data on a systematic basis concerning the currency composition of individual countries' debt and trading contracts, on both of which there exists a remarkable dearth of firm knowledge. The International Monetary Fund should assist in this national-level data collection, where necessary, and assemble it for analytical use, together with the data it collects on the composition of reserves.
- (g) Further detailed research at the industry-level and firm-level is required in order to assess more adequately the effects of exchange-rate instability, or periodic disruptions in foreign-exchange markets, upon volumes and patterns of trade, investment and production in particular countries. In the light of the significant increase in exchange-rate turbulence

under the current exchange-rate regime the importance of an improved understanding of its real effects has greatly increased.

II. INTRODUCTION

49. It is generally agreed that the Bretton Woods adjustable peg system of exchange rates was no longer sustainable under the conditions of the 1970s. The increased size and mobility of liquid capital at this time brought out the inherent brittleness and susceptibility to crisis of post-war international monetary arrangements. The post-1973 exchange rate regime differs from the adjustable peg system primarily "by the greater frequency of exchange rate changes, by the larger share of the external adjustment burden that is assigned to the exchange rate, and by the absence of a publicly declared target rate" (Goldstein, 1). While the post-1973 system of managed flexibility of exchange rates, formally authorized by the Second Amendment to the Articles of Agreement of IMF in 1978, may have somewhat eased medium- to long-run balance-of-payments adjustment among the major industrialized countries, new and, to some extent, unforeseen problems have emerged in its functioning. Particularly required is a careful assessment of the implications for developing countries of the workings of the new more flexible exchange rate regime.

50. In assessments of alternative exchange-rate regimes it is important to distinguish between: (a) the effects of longer-run realignments of currency values over time, which can occur under any realistic exchange-rate system; and (b) the effects of floating exchange rates themselves. It is unfortunately not possible to state definitively that longer-term realignments are totally unrelated to the exchange-rate regime; advocates of more stable exchange rates frequently argue, for instance, that floating rates reduce monetary discipline and thus contribute to more divergent and higher rates of inflation and, hence, to currency realignments. Arguments can also be heard to the effect that the floating-rate regime is partially responsible for slower rates of growth in output capacity, a deterioration in the terms of the unemployment/inflation trade-off, and slower realized growth. In the absence of counter evidence demonstrating what would have occurred if rates had not floated, these issues cannot be resolved conclusively. This study does not therefore attempt to address them. Recent surveys conclude, in any case, that international monetary arrangements cannot be assigned any more than a marginal role in any of these macro-economic questions (Williamson, 1980; Goldstein, 1980). Our attention is confined to an analysis of the effects of the floating exchange rate system on the assumption that global macro-economic developments and longer-run currency realignments are not significantly affected one way or the other by it. This approach implies that its prime concern is with the short-run and medium-term exchange-rate instability which characterizes the current floating exchange-rate system; at some points, however, longer-run issues are nevertheless addressed, since they cannot be evaded.

51. This focus of the analysis is not to be taken as reflecting a view that longer-run currency realignments are relatively unimportant. On the contrary, the field research undertaken at the country level generally revealed that monetary policy-makers in the developing countries were more concerned about the longer-run changes in the values of major currencies, and particularly that of the United States dollar, than they were about the shorter-term fluctuations which were the primary object of our enquiry. Not only are the longer-run realignments of the major currencies of crucial significance for developments in the global economy, but at the national level also, in the developing countries as elsewhere, longer-run exchange-rate policies and regimes, together with other balance-of-payments policies, are likely to be of greater importance to overall development patterns than are the effects of short-term exchange-rate fluctuations.

52. The principal object of this study is the assessment of the effects of the exchange-rate system as a whole, not assessments as to the appropriate policies for individual developing countries within the system. It is obviously not always possible, however, to separate the specifically national from the systemic issues. Indeed a number of national case studies were undertaken as background for this report in order to shed light upon the effects of the altered exchange-rate system upon individual developing countries.

53. The most troublesome feature of the post-1973 exchange-rate regime is unquestionably the greatly increased "turbulence" - short-term instability of an erratic kind - of foreign-exchange markets. There has been a significant increase in short-term and medium-run nominal and real exchange-rate instability in the industrialized countries. Between June 1973 and February 1979, the average absolute percentage change in pound, franc and mark rates vis-à-vis the United States dollar exceeded 2 per cent per month, more than twice the average rate of monthly change in wholesale and consumer price levels, and much larger proportions of the monthly changes in relative price levels (Frenkel & Mussa, 1980, 374-5). This instability has been erratic and unpredictable; it seems unrelated to the longer-run requirements of balance-of-payments adjustment, and is therefore frequently described as "overshooting".

54. Flexible exchange rates, it was thought, ought to permit quicker exchange-rate responses to international differences (or more accurately, inconsistencies) in inflation rates, as well as structural changes of various kinds. It seems, however, that deviations from purchasing power parity have been significantly greater in the floating period than in the 1957-1972 period of adjustable pegs; and these increased deviations are primarily the product of sharply increased variance in nominal exchange rates, with sluggish price changes, rather than of increased differentiation of inflation rates (Genberg, 1978, 260). Not only have short-run fluctuations in exchange rates been unrelated to those in relative national price levels, but "changes in exchange rates over longer periods of time have frequently been associated with large cumulative divergences from relative purchasing power parities" (Frenkel & Mussa, 1980, 375; see Isard, 1978, Genberg, 1978, Krugman, 1978, Kravis and Lipsey, 1978, Kenen and Pack, 1980, for empirical confirmation).

55. It is true that the required longer-term adjustments in exchange rates are now achieved more gradually than hitherto and that the periodic speculative crises of the adjustable peg system are no longer observed. But large short-term fluctuations - far beyond the requirements for current account adjustment and reflecting, above all, the continuing importance of large short-term capital flows responding to changing expectations as to political events, inflation rates, exchange controls, and ultimately exchange rates themselves - have reduced enthusiasm for the new regime's possible accomplishments. Contrary to some expectations, these fluctuations have not gradually declined as the markets became more accustomed to the new, more flexible exchange rate regime. It seems that the stabilizing role which many observers expected short-term capital flows to play only appears at the outer limits of a very wide "band" of short-term fluctuations around the trend, and sometimes only following governmental intervention. As one analyst put it, "banks and other private risk-bearers were unwilling to take over the function previously carried by central banks under the system of pegged exchange rates: that of guaranteeing a range for the exchange rate for any length of time". (Black, 1977, 176). There have not been serious efforts as yet to grapple with the continuing problem of short-term international capital flows "sloshing" between currencies in enormous volumes.

56. The foreign-exchange markets now appear to be just as inevitably turbulent as other asset markets, such as those for stocks or commodities. Indeed financial analysts have been calling attention to the growing link between speculation in commodities and that in foreign exchange; commodity traders now must assess the short-term changes and expectations for major currency values as well as the real prospects for commodities, and investors of liquid capital may find commodities no less appropriate a short-term investment than financial assets denominated in volatile currencies. There are no effective equivalents in international currency markets for the regulatory agencies which oversee particular national stock or commodity exchanges, limiting the degree of price change permitted within given periods, suspending trade for particular items in unusual circumstances, and policing certain "rules of the game". Governments can and do intervene in currency markets, but there are no established rules for their conduct and there is potential for different governments acting at cross-purposes; the IMF has been authorized to exercise surveillance over exchange rates but it has little policing power except in respect of its poorer members. Small wonder that "floating" has led to substantial turbulence in exchange rates.

57. On the face of it, then, there has been little success in attaining the internationally agreed objective of avoiding erratic and excessive exchange rate fluctuations, or at least moderating them when they are not the product of underlying economic conditions. Disruptions and instability in underlying economic and financial conditions can, of course, never be totally eliminated; and the post-1973 period has been one of considerable international economic disorder. But "orderliness" of markets can be achieved with varying degrees of success - whether one speaks of money, bond, commodity, or foreign-exchange markets; and, in this case, it is generally agreed that success has been limited.

58. Developing countries' terms of trade (and overall income) are more unstable, on average, than those of richer countries. (Branson and Papaefstratiou, 1978, 53). At the same time the costs of such instability are presumably greater, however they are measured, in developing countries than they are in richer countries. This report will show that, contrary to earlier assessments (e.g. Cline, 1976), the costs of the instabilities of the present international exchange-rate regime bear especially heavily upon the developing countries. For the major industrialized countries to return to the adjustable peg regime is not now a feasible option even if it were considered desirable. It may well be that there were alternative exchange rate regimes, involving crawling pegs or reference rates or purer floating, which were just as "realistic" as the adjustable peg system which was abandoned or the "managed float" which followed it. But the only two regimes for which there exists firm evidence are the two actually experienced. It is not, therefore, very fruitful to debate further the academic question as to what might have been in a variety of hypothetical worlds and thus to determine in some philosophical sense whether the degree of turbulence in foreign-exchange markets under the managed float has been "excessive" or not (e.g. Frenkel & Mussa, 1980). Rather, since, as will be seen, it is undeniable that there has been a quantum jump in the degree of short-term exchange rate instability in the post-1973 period, it is important to ascertain whose interests have been most affected by it, whether there have been significant costs imposed, and, if so, how governmental and intergovernmental policies might now reduce them. It will be argued that, given the "flexible" character of the present exchange-rate regime, measures to create a greater degree of exchange rate "order" and measures to reduce the costs of such disorder as remains have now become urgent matters for policy-makers' attention.

III. EXCHANGE-RATE INSTABILITY UNDER THE FLOATING-RATE REGIME

59. As has been seen, erratic short-term instability (or turbulence) of exchange rates has been a major problem under the floating-rate regime. In order to analyse this phenomenon it is important to set out some methodological guidelines. Instability may, after all, be defined in many ways. For the purpose of this study, fluctuations from month to month have been chosen as the focus for analysis. Day-to-day fluctuations or quarterly or annual fluctuations might also be analysed. The former are probably too short term, however, to influence decision-making on international trade or investment significantly, and the data required for their analysis are rather unwieldy. Confining analysis to fluctuations over time periods longer than a month, on the other hand, would mean foregoing information which may well be relevant for allocative decisions. Moreover, most studies of exchange-rate instability to date have employed month-to-month data, and IMF provides convenient data which facilitate analysis of this kind.

60. Although month-to-month fluctuations in exchange rates are the prime area of interest in this study, it is worth noting that day-to-day instability has often been considerable during the floating-rate period. Table 1 shows average daily percentage changes in bilateral nominal exchange rates by quarter during the 1976-1978 period. During periods

Table 1

Average daily changes in selected currency rates against the U.S. dollar^{a/}, 1975-1978

	1976					1977				1978	
	1st quarter	2nd quarter	3rd quarter	4th quarter		1st quarter	2nd quarter	3rd quarter	4th quarter	1st quarter	2nd quarter
Canada	0.14	0.15	0.13	0.22		0.25	0.12	0.12	0.21	0.15	0.19
France	0.25	0.15	0.27	0.17		0.11	0.05	0.21	0.24	0.59	0.26
Germany, Fed. Rep. of	0.26	0.19	0.20	0.22		0.22	0.14	0.29	0.42	0.56	0.33
Italy	0.81	0.50	0.11	0.15		0.03	0.01	0.04	0.09	0.21	0.14
Japan	0.10	0.11	0.16	0.15		0.21	0.26	0.18	0.30	0.32	0.48
United Kingdom	0.24	0.46	0.28	0.55		0.13	0.02	0.06	0.36	0.47	0.27
											0.46

Note:^{a/} Average percentage change from previous day in spot exchange rates against U.S. dollar (New York noon quotations).

of high uncertainty the average daily fluctuation has been a multiple of that in periods of relative calm. For instance, the sterling/dollar rate changed daily by an average of 0.55 per cent in the fourth quarter of 1976 whereas this average was only 0.02 per cent in the second quarter of 1977; and the mark/dollar rate, which averaged only 0.14 per cent daily fluctuations in the second quarter of 1977 moved an average of 0.56 per cent daily in the first quarter of 1978.

61. For the purpose of comparing exchange rate experiences over time, and in particular during different exchange-rate regimes, it has been necessary to summarise the instability data for particular periods. Comparing the degree of instability of exchange rates between the adjustable peg period and that of the managed float raises some methodological problems. The change in regime involved a shift from a system in which exchange rates changed infrequently but by large amounts to one in which they changed frequently but by much smaller amounts. Moreover, under both regimes there have been periods of particular turbulence or crisis, between which exchange rates have been relatively much more stable. There would be a strong case for comparing the two regimes simply in terms of their performance during such periods of particular pressure. But this is not the approach we have adopted in this study.

62. For our purposes, the exchange rate experience of the last fifteen years has been divided into three periods. The period of the late 1960s up until the breakdown of the Bretton Woods system of par values was not a period of total stability by any means, but the period beginning in January 1966 up to and including August 1971 can be taken as representative of the last days of the adjustable peg system and will be referred to as period 1. The effective devaluation of the United States dollar (or the revaluation of other currencies), in August 1971, through temporary suspension of its convertibility, signalled the beginning of a period of extreme monetary uncertainty. Dollar convertibility was restored in December 1971, at which time new par values for the major currencies were also agreed; but despite strenuous efforts to maintain the new par values, including a second devaluation of the United States dollar in February 1973, by March 1973 efforts to maintain a system of par values had been abandoned and the major currencies began floating against one another, an arrangement which has continued to the present day. The period during which there was an abortive attempt to return to the system of par values, extending from September 1971 to March 1973, is here designated as period 2. Period 3, then, is that of the managed floating rate system that has existed ever since; it extends in our data from April 1973 to June 1979.

63. Table 2 shows the variability of the currencies of selected major developed market economies (France, Federal Republic of Germany, Japan, Switzerland and the United States of America) against four major currencies (dollar, franc, pound and mark) and the SDR. ^{1/} The three periods considered are as defined above and the measured instability is the variance of monthly changes in the exchange rate. Without exception, the variability of the currencies of all six developed market economies increased against all four currencies and the SDR between the

Table 2
Variability in the nominal exchange rates of selected developed market-economy countries a/
 (per cent)

Country	National Currency	Franc			Deutsche mark			Pound			Dollar			SDR		
		Periodb/			Periodb/			Periodb/			Periodb/			Periodb/		
		1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
<u>Developed</u>																
France	Franc													0.99	0.53	3.78
Germany, Fed. Rep. of	Mark	2.11	0.83	3.09										0.82	1.57	5.14
United Kingdom	Pound	2.73	2.64	5.03	2.26	3.05	6.15							1.60	2.98	3.37
United States	Dollar	1.14	4.15	5.58	0.74	3.81	7.08	1.89	3.50	4.93					4.19	0.91
Japan	Yen	1.19	0.85	6.21	0.74	0.49	6.83	1.89	3.66	6.66	0.02	5.87	5.91	0.02	1.36	4.28
Switzerland	Franc	1.54	1.72	4.98	0.73	0.69	3.20	2.28	5.59	7.25	0.37	6.40	8.76	0.37	2.18	6.17

Source: The calculations are based on information available in various issues of International Financial Statistics, International Monetary Fund, Washington.

Notes: a/ The measure of variability is the variance of the monthly percentage changes in the nominal exchange rates.

b/ The periods are defined as follows: Period 1 is January 1966 to August 1971; Period 2 is September 1971 to March 1973; and Period 3 is April 1973 to August 1979.

first and third periods under review. In general, the increases in the instability of these bilateral exchange rates are proportionately very large, with a doubling or even trebling of the measured instability being not uncommon.

A. Measurement of instability

64. In choosing to compare performance over longer periods, during which there were subperiods of both crisis and stability, suitable and consistent measures must be adopted for making the comparisons. Two basic measures of instability have been employed in most of our analyses. The first is the standard deviation of monthly percentage change; this is the measure which has been employed by IMF in earlier analyses (IMF, 1979, 42; see also Kafka, 1978) and will be referred to as the "IMF measure". It adjusts for trend by relating actual percentage change in each period to the average percentage change for the period as a whole. The second is the standard error from an exponential regression of monthly observations over time; it will be referred to as the "standard error" measure. 2/

65. The IMF measure, concentrating on month-to-month changes, is concerned with monthly adjustments to the previous month's state, regardless of whether either month is anywhere near the long-run trend. Thus, if there is no change from one month to the next but in both months the exchange rate is far off its trend, the IMF measure will record stability, whereas the standard error measure will record instability. The standard error measure is more concerned with deviations from trend than with month-to-month changes. Whether monetary authorities are or should be more concerned with month-to-month changes regardless of trend, or deviations from trend, regardless of month-to-month changes, is entirely a matter of judgment.

66. Variability is obviously not precisely the same as unpredictability. Demonstrating that variability of exchange rates has increased during the period of the float does not constitute proof positive that foreign-exchange risk has increased unless it can also be shown that predictability has thereby declined and uncertainty increased. There have been various attempts to measure uncertainty, for example, by the success with which forward exchange rates "predict" future spot exchange rates (Aliber, 1976; Hooper and Kohlhagen, 1978), all of which indicate increased uncertainty in the floating rate period; these too are vulnerable to criticism, in particular to the charge that there are other (simultaneous) determinants of spot and forward exchange rates, notably short-term interest rates, and that "predictability" cannot therefore be measured by relationships between spot and forward rates; some even suggest that forward premia are basically determined by money market phenomena (McKinnon, 1979, 217). We shall nevertheless presume, with the majority, that instability can be regarded as a proxy measure for uncertainty.

B. Effective exchange rates

67. Whereas in the adjustable peg regime of period 1 exchange rate alterations took the form of discrete changes, usually of considerable size, in the value of a currency vis-à-vis the universally agreed numéraire of the United States dollar (or gold or, later, SDRs, which had officially fixed values in terms of the dollar), in the floating rate regime of period 3 they occur more gradually and the appropriate numéraire is no longer so clear. With the major currencies floating vis-à-vis one another, a country which has pegged its currency to the United States dollar would experience an effective devaluation with respect to other currencies as the value of the dollar itself depreciated. It would only retain its previous "overall" exchange rate in such circumstances if at the same time it appreciated its currency vis-à-vis the United States dollar to which it is pegged. In short, it is no longer so clear what the exchange rate is, and whether during any given period the value of a currency is rising or falling, stable or unstable.

68. It was precisely to provide a measure of the "average" movement in a country's exchange rate that the concept of effective exchange rate indices was developed. While the underlying notion has been implicitly used for much longer, it was given its greatest impetus by the breakdown in the Bretton Woods par value system. During the past decade, there has been considerable discussion as to the best manner of calculating such indices (e.g. Hirsch and Higgins (1970), Rhomberg (1976), Morgan Guaranty (1978) and Honohan (1979)). Effective exchange rate indices, of one kind or another, are now an accepted means of measuring exchange rate trends and fluctuations.

69. All measures of effective exchange rates are constructed as weighted-averages of individual bilateral exchange rate indices. Controversy surrounding the appropriate means of constructing effective exchange rate indices has related primarily to the choice of appropriate weights. Most effective exchange rate indices have employed weights which are based upon the composition or expected composition of the country's external trade. Bilateral trade weights - either imports, exports, or total trade - are most frequently employed in developing countries while, for the industrial countries, "better" weights have been derived from the IMF's multilateral trade model of the world economy. For some purposes, the currency composition rather than the geographic direction of external trade provides a more suitable basis for weighting various bilateral exchange rates.

70. Much of the controversy concerning effective exchange rate index construction stems from the fact that the calculations are undertaken for the purpose of answering a number of different questions. A brief discussion of the possible uses of effective exchange rate measurement may clarify these matters a little.

71. One commonly expressed purpose of effective exchange rates is to

provide a measure of the "impact of currency changes on each country's competitive position" (Morgan Guaranty, 1978, p.7). Thus, if a country "effectively" devalues vis-à-vis its major trading partners, this implies that exchange rate changes, considered in isolation, have favourably affected the (price) competitive position of the country in question, while an "effective" revaluation signifies the reverse. For the purpose of constructing such an index of competitiveness, the most commonly used weighting schemes are bilateral trade weights. If competitiveness of a country's exports are to be analysed, export weights are the most appropriate. Such bilateral trade weights, however, do not take into account the frequent fact that competition also occurs in third markets between countries which do not trade with one another. Some employ countries's shares of total worldwide trade (excluding the home country) as weights in order to try to overcome this problem.

72. A closely related potential use of effective exchange rate indices is to quantify the effects of exchange rate changes on the balance-of-payments position of individual countries. For this purpose it has generally been argued that the use of trade weights is unsatisfactory since they do not incorporate information on price elasticities. Instead, the weights should be derived from a multilateral trade model which reflects both existing trade relationships and the sensitivity of trade flows to changes in exchange rates. Moreover, unlike conventional export-weighted indices, such a model can take into account the existence of competitive relationships between non-partner countries. Such a model could also take into account other macro-economic effects of changes in the trade balance. A considerable amount of research has been devoted to such models, and the IMF regularly publishes effective exchange rates for 15 developed countries using weights derived from such a model. While these are widely employed, such indices have been criticized for the weakness of the underlying elasticities estimates. One critic argues that the use of multilateral models for the purpose of generating weights to be used in effective exchange rate calculations "amounts ... to employing an untested 'black box' to obtain results". (Honohan, 1978, 84).

73. Another potential use of effective exchange rates is to quantify the effects of exchange rate changes on the domestic price level, and/or price structure (tradeables versus non-tradeables). In this connexion, it has been argued (e.g. Crockett and Nsouli, 1977, pp.130-131) that the appropriate index is an import-weighted one since most countries, and virtually all developing countries, are price-takers as far as their imports are concerned; and exchange rate changes are, therefore, translated directly into changes in the domestic price of imports. Many countries, particularly developing ones, are price-takers in their export trade as well so that total trade weights (exports plus imports) would often be even more appropriate for this purpose.

74. It is, however, the currency composition of trading (and financial) contracts rather than their geographic direction which is important for assessing the short-term domestic impact of short-term fluctuations in the value of foreign currencies. Most Latin American countries' exports,

for instance, are price in United States dollars regardless of whether they are destined for United States markets. In the calculation of an effective exchange rate for the purpose of assessing short-term domestic price effects, therefore, the relevant weighting system might better be based upon the currency of denomination of trade rather than its direction. Since the necessary data on the denomination currencies of trade are rarely available, statistical efforts of this kind have been forced to make fairly crude assumptions as to likely currency composition (Bacha, forthcoming; Lipschitz, 1979, 433; Riedel and Bautista, 1980). In many circumstances, the currency in which prices are fixed is not that in which contracts are actually denominated, with the latter price determined purely on the basis of the exchange rate between the currency of denomination and that of the price-fixing (Lipschitz, 1979, 432). While this phenomenon may sometimes be important, for instance in Japanese dollar-denominated trade with Latin America, information on it is even less readily available than that on currency denomination.

75. For most developing countries, sufficient information does not yet exist for calculating any but bilateral trade-weighted effective exchange rate indices. Hence, despite their possible disadvantages, for the purposes of this study, in which coverage is as comprehensive as possible, the effective exchange rates used are of the trade-weighted variety. In order to provide some indication of the sensitivity of such calculations to the formulation employed, three separate weighting schemes have been employed: import weights, export weights and total trade weights. The weights used in the period January 1966 - March 1973 are based on 1970 trade flows; while those for the period thereafter are based on trade flows in 1976. Specifically, for the import and export indices, the weights were calculated on the basis of the 25 major import or export partners for which the IMF reports exchange-rate data. (The calculations exclude all socialist countries with the exception of Romania.) The trade weights were then calculated from these import and export weights. In each case, the weights were normalized to sum to one. Only merchandise trade, and not that in services, enters this weighting scheme.

76. Each of the three indices was calculated as a geometrically-weighted average of the relevant bilateral exchange rate indices according to the formula:

$$EER = \prod (E_{it}/E_{io})^{w_i}$$

or equivalently,

$$\log EER = \sum w_i \log (E_{it}/E_{io}),$$

where E_{it} represents the price of domestic currency in terms of the i th partner currency at time t . The effective exchange rates calculated for this study are geometric rather than arithmetic indices since only geometric indices are invariant to the definition of the exchange rate which is employed. (Brodsky, 1980). They have been calculated for all countries for which there were data in the IMF data bank.

77. Table 3 shows the measures of effective nominal exchange rate instability for major currencies in the periods defined above. These have been calculated from effective exchange rate indices constructed on the basis of all three weighting systems: imports, exports and total trade. These data complement those shown in table 2 above which relate to bilateral exchange rates. It can be seen, again, that all experienced very great increases in instability, no matter how the indices were calculated, as between period 1 and period 3.

78. There is no necessary correspondence between the effective exchange rate for the economy as a whole and that which is "effective" for any particular firm or sector. To the extent that the origin of their imports and/or the destination of their exports differ from those of the entire country, individual firms or industries may experience effective exchange rate trends and fluctuations quite different from those of the economy as a whole and from one another (e.g. Frenkel, 1975; UNCTAD, 1980). Individual producers and traders, particularly the smallest ones, are likely to be both different from and much less diversified in their activities and in the direction of their trade than the country as a whole; so that the incidence of increased instability and uncertainty will be different and, in some cases, may be proportionately much larger for them than would be suggested by aggregative national statistics.

C. Real effective exchange rates

79. Exchange risk faced by a trading firm is not the same as price risk. To some degree, exchange rate fluctuations may merely offset fluctuations in domestic prices - particularly for homogeneous goods traded in competitive world markets - in which case nominal exchange rate instability overstates the resulting price instability. Many therefore have argued that it is the relative instability of real, i.e. relative price deflated, rather than nominal exchange rates which is at issue in the comparison of the degree of exchange risk faced by traders under alternative exchange rate regimes.

80. Purchasing power parity theory suggests that changes in nominal exchange rates, above all, reflect differential rates of change in prices. Thus one expects countries experiencing particularly rapid price inflation to experience devaluation in the value of their currencies vis-à-vis those of other countries with lower rates of inflation. While these expectations may frequently be approximately realized with respect to substantial divergences in rates of inflation over longer runs, there exists rather more doubt, as has already been noted, as to their realism in the short and medium-runs. (See Isard, 1978; Katseli-Papaefstratiou, 1979 for surveys.) In assessing domestic incentives or international competitiveness it is clearly necessary to consider the relationship between prices for different domestic goods and services, and between price changes in foreign and domestic goods and services, rather than simply looking at nominal exchange rate changes.

Table 3

Average monthly variability of nominal effective exchange rates: major currencies, 1966-1971 and 1973-1979*

	IMF Measure **				Standard Error Measure ***			
	Import Weights +		Export Weights +		Trade Weights		Import Weights +	
	Period 1	Period 3	Period 1	Period 3	Period 1	Period 3	Period 1	Period 3
France	1.051	1.442	1.039	1.329	1.045	1.384	3.669	3.908
Germany, Fed. Rep. of	0.893	1.517	0.883	1.421	0.887	1.465	2.555	3.037
Japan	0.284	2.123	0.243	2.116	0.252	2.115	0.455	9.906
Switzerland	0.586	1.865	0.595	2.017	0.585	1.931	1.124	4.272
United Kingdom	1.089	1.635	1.075	1.619	1.082	1.627	3.316	6.274
United States	0.269	0.743	0.302	0.877	0.272	0.796	0.968	2.083

* January 1966 to August 1971 inclusive is designated as Period 1. April 1973 to June 1979 inclusive is designated as Period 3. Effective rates were calculated as geometric averages.

** Standard deviation of monthly percentage change.

*** Standard error from exponential trend.

+ Top 25 trading partners in 1970 for Period 1, and in 1976 for Period 3.

81. Real effective exchange rates are constructed by adjusting the component bilateral nominal exchange rate indices for changes in the relative price level of the partner countries and the home country. Thus, if E_{it} represents the price of the home currency relative to a given base period in terms of the currency of the i th partner country at time t (that is, what was previously denoted as (E_{it}/E_{i0}) ; P_{it} represents the price level of the i th country at time t relative to the same base period; and P_t represents the price level of the home country, also relative to the same base period; the real effective exchange rate index relative to the given base period is:

$$REER = \prod (E_{it} P_t / P_{it})^{w_i} \quad , \text{ or alternatively}$$

$$REER = EER/P \quad , \text{ where the "effective" price index } P \text{ is}$$

$$\text{defined by } P = \prod (P_{it} / P_t)^{w_i}$$

82. The interpretation of the level of the real effective exchange rate index is analogous to that of the nominal index. One interpretation is that such indices provide an aggregate picture of the effects of exchange rate movements, net of differential relative prices changes, on the competitiveness of producers in the traded goods sector (Morgan Guaranty, 1978).

83. Alternatively, real effective exchange rate indices can be interpreted as indicating the changing prices of imports, exports, and tradeables relative to other domestic prices. Real effective depreciation then implies that prices of tradeables, which are to some degree "held in place" by world trading possibilities, have risen in relation to those of non-tradeables. In many developing countries, exports are concentrated in a relatively few items and their prices are established on highly volatile world commodity markets; when the price of a primary export in which a country's exports are concentrated rises, there are pressures for both the value of its currency and the domestic price level to rise simultaneously. In such circumstances, it does not make much sense to analyse the behaviour of "the average" price for tradeables or, therefore, the real effective exchange rate.

84. Real effective exchange rates have, in any case, been calculated for as many countries as possible. Wholesale price series were employed where they were available and consumer price indices where they were not. Price data are not always available at all so that the number of countries for which these estimates can be prepared is considerably lower than the number for which nominal effective exchange rate data were reported. The quality of the price series is in some of the developing countries also subject to some question so that these data should be viewed with particular caution. Moreover, the fact that wholesale price indices tend to be weighted heavily by tradeables in developing countries can reduce their usefulness as measures of "domestic" price trends, even when exports are quite diversified.

85. Table 4 shows the degree of instability of real effective exchange rates of major currencies, measured in two different ways, in 1966-1971

Table 4

Average monthly variability of real effective exchange rates: major currencies, 1966-1971 and 1973-1979*

	IMF Measure **				Standard Error Measure ***			
	Import Weights +		Export Weights +		Trade Weights		Import Weights +	
	Period 1	Period 3	Period 1	Period 3	Period 1	Period 3	Period 1	Period 3
France	1.130	1.326	1.124	1.243	1.127	1.280	2.645	3.957
Germany, Fed. Rep. of	0.956	1.530	0.944	1.436	0.948	1.478	3.183	2.756
Japan	0.494	1.942	0.450	1.930	0.447	1.926	1.374	7.899
Switzerland	0.640	1.749	0.640	1.911	0.635	1.820	1.411	4.042
United Kingdom	1.289	1.776	1.268	1.741	1.278	1.760	3.973	5.192
United States	0.415	1.301	0.425	1.364	0.414	1.322	1.121	1.882

* January 1966 to August 1971 inclusive is designated as Period 1. April 1973 to June 1979 inclusive is designated as Period 3. Effective rates were calculated using wholesale price indices, and as geometric averages.

** Standard deviation of monthly percentage change.

*** Standard error from exponential trend.

+ Top 25 trading partners in 1970 for Period 1, and in 1976 for Period 3.

(period 1) and 1973-1979 (period 3). With the exception of one measure of instability of the mark, all experienced significant increases in the post-1973 period.

IV. EXCHANGE-RATE INSTABILITY IN THE DEVELOPING COUNTRIES

A. Nominal effective exchange rates

86. Table 5 presents both of the measures of instability in trade-weighted nominal effective exchange rates for all of the countries for which there are data and for each of our three time periods. In table 6 a summary of change between period 1 and period 3 is presented; extracted from the complete data in the previous table is information as to whether exchange rate instability rose or fell in developing and developed countries. (The summary data reported in this and in subsequent tables are based on the trade-weighted effective exchange rates. Import-weighted and export-weighted effective exchange rates yield substantially the same overall results.) It can immediately be seen that the overwhelming majority of both developing and developed countries experienced increases in exchange rate instability between period 1 and period 3. Of 124 developing countries for which there are data, 103 experienced increases in instability as measured by the IMF measure, and 109 did so in terms of the standard error measure. Both instability measures registered increases in 31 out of 37 of the poorest (low-income) countries as defined in the 1979 UNCTAD Handbook. In many cases, between periods 1 and 3, measured instability rose three, four, and five-fold.

87. Charts I to VI illustrate the frequency distribution of different levels of nominal effective exchange rate instability, using the IMF measure, in periods 1 and 3. The number of countries experiencing the levels of instability listed along the bottom of the charts (these bases vary from chart to chart) is shown by the height of the various bars in the charts. It is quite clear that the distribution changed significantly between these two periods, both for developing and developed countries, with far fewer experiencing zero instability (none of the developed countries) in period 3 and the centre of the distribution shifting to the right.

B. Real effective exchange rates

88. Table 7 records, in a manner similar to that of table 5, the degree of real effective exchange rate instability for all of the countries for which there are data. Table 8 summarizes the changes in real effective exchange rate instability between period 1 and period 3.

89. Instability of real effective exchange rates, like that of nominal effective exchange rates, has increased between periods 1 and 3 in the vast majority of countries, both developing and developed. When measured

Table 5
Nominal effective exchange rate instability all countries, periods 1 to 3
(trade-weighted)

	IMF Measure			Standard Error from Exponential Regression		
	Period 1	Period 2	Period 3	Period 1	Period 2	Period 3
Afghanistan	1.384	2.405	1.488	2.853	3.412	5.218
Algeria	0.584	1.143	1.138	1.278	0.913	1.852
Angola	0.217	0.881	2.234	0.822	7.346	7.346
Argentina	3.606	4.076	9.665	12.955	8.475	41.636
Australia	0.451	1.350	2.144	1.125	4.427	4.427
Austria	0.533	0.442	0.896	1.238	0.501	1.533
Bahamas	0.313	0.446	0.239	0.565	0.696	0.695
Bahrain	0.335	1.000	0.734	1.077	0.863	2.413
Bangladesh	..	..	4.751	..	..	14.731
Barbados	0.654	0.844	1.187	2.013	1.438	3.504
Belgium	0.478	0.493	0.965	1.310	0.618	2.127
Belize	0.908	1.006	1.378	2.798	1.792	6.660
Benin	0.481	0.436	0.910	1.596	0.518	2.652
Bermuda	1.613	0.798	0.508	2.980	1.289	1.923
Bolivia	0.457	9.534	2.732	1.985	15.745	9.890
Botswana	0.946	1.902	2.165	2.352	3.290	4.538
Brazil	2.939	0.742	1.451	4.480	0.948	8.660
Brunei	0.153	0.402	1.508	0.417	0.509	4.803
Burma	0.851	3.567	3.375	1.888	5.775	7.566
Burundi	0.396	1.958	1.902	1.051	2.215	3.872
Canada	0.506	0.667	1.173	1.397	1.136	4.682
Cape Verde	0.107	0.259	..	0.343	0.226	..
Central African Republic	0.509	0.465	0.787	1.799	0.629	2.102
Chad	0.664	0.421	0.774	2.042	0.511	2.027
Chile	7.055	8.302	10.964	7.540	9.890	75.458
Colombia	4.186	0.671	1.780	2.788	0.997	2.880
Comoros	0.177	0.261	0.431	0.543	0.358	1.242
Congo	0.548	0.506	1.089	1.894	0.704	2.468
Costa Rica	0.115	0.586	2.365	0.458	0.811	6.878
Cyprus	1.588	0.914	0.578	2.588	0.915	2.281
Democratic Yemen	1.651	1.013	1.081	3.412	0.984	4.410
Democratic Kampuchea	4.407	17.217	..	12.372	18.948	..
Denmark	0.424	0.588	0.926	0.825	0.968	1.584

Table 5 (cont'd)

Nominal effective exchange rate instability all countries, periods 1 to 3
(trade-weighted)

	IMF Measure			Standard Error from Exponential Regression		
	Period 1	Period 2	Period 3	Period 1	Period 2	Period 3
Djibouti	0.403	0.827	..	0.872	0.863	..
Dominican Republic	0.095	0.461	0.424	0.378	0.644	1.382
East Timor	0.172	1.094	0.2091	0.557	1.127	8.831
Ecuador	3.442	0.814	1.005	10.139	1.121	3.992
Egypt	1.679	2.158	5.214	3.053	2.183	15.383
El Salvador	0.167	0.751	0.735	0.574	1.020	2.415
Equatorial Guinea	1.059	0.953	..	3.110	1.138	..
Ethiopia	0.185	2.448	0.980	0.686	2.023	3.347
Faeroe Islands	0.164	0.390	0.644	0.359	0.622	1.073
Falkland Islands (Malvinas)	0.051	0.074	0.582	0.170	0.123	2.600
Fiji	0.770	1.564	1.109	0.976	1.591	1.547
Finland	2.180	0.550	0.997	6.030	1.142	3.734
French Guiana	0.358	0.520	0.705	1.160	0.640	1.859
French Polynesia	1.057	1.293	0.860	2.376	1.369	2.231
France	1.045	0.900	1.384	3.603	1.240	3.768
Gabon	0.484	0.558	0.858	1.617	0.718	2.064
Gambia	0.709	5.729	1.160	2.376	4.597	3.997
Germany, Federal Republic of	0.887	0.835	1.465	2.563	0.964	3.076
Ghana	3.692	14.009	5.319	9.411	13.255	27.054
Gibraltar	0.760	0.872	1.213	2.473	1.217	4.617
Greece	0.297	1.384	1.598	1.139	1.899	3.045
Greenland	0.044	0.121	0.295	0.139	0.152	0.472
Grenada	1.742	1.806	0.913	1.245	2.912	1.653
Guadeloupe	0.235	0.336	0.299	0.719	0.446	0.815
Guatemala	0.122	0.614	0.664	0.477	0.840	2.195
Guinea	0.315	1.814	1.347	0.545	1.472	2.332
Guinea Bissau	0.154	0.591	1.537	0.532	0.619	3.187
Guyana	0.872	2.013	0.857	2.725	1.893	2.087
Haiti	0.104	0.656	0.493	0.290	0.922	1.351
Honduras	0.093	0.445	0.572	0.346	0.620	1.683
Hong Kong	1.185	0.860	1.349	1.331	0.905	5.209
Iceland	4.332	1.959	3.740	12.299	3.691	10.583
India	4.508	1.238	1.225	10.738	1.778	2.663

Table 5 (cont'd)

Nominal effective exchange rate instability all countries, periods 1 to 3
(trade-weighted)

	IMF Measure			Standard Error from Exponential Regression		
	Period 1	Period 2	Period 3	Period 1	Period 2	Period 3
Indonesia	..	1.643	3.164	..	2.270	13.309
Iran	0.437	1.790	1.317	1.435	2.168	4.448
Iraq	0.561	0.957	1.283	0.601	1.187	3.797
Ireland	0.502	0.536	0.853	1.352	0.817	2.758
Israel	2.667	1.141	5.421	3.765	1.636	15.050
Italy	0.321	1.165	1.792	0.836	1.748	4.363
Ivory Coast	0.576	0.610	0.890	1.863	0.787	2.329
Jamaica	1.654	1.828	4.099	3.330	3.464	18.546
Japan	0.252	1.706	2.115	0.359	2.215	9.767
Jordan	0.287	1.642	1.347	0.792	1.868	1.429
Kenya	0.409	1.120	1.417	1.562	1.697	2.274
Kiribati	..	1.006	0.842	..	0.844	2.684
Korea, Republic of	1.562	1.319	2.272	3.929	2.149	4.600
Kuwait	0.352	2.363	0.806	1.127	1.682	3.595
Lao, People's Dem. Rep. of	0.315	14.048	..	0.586	25.414	..
Lebanon	0.634	1.237	2.759	1.378	1.507	7.024
Lesotho	..	4.237	2.009	..	5.514	4.251
Liberia	0.233	1.184	1.321	0.773	1.706	3.942
Libyan Arab Jamahiriya	0.357	2.454	1.307	1.106	1.910	4.280
Macao	0.818	1.472	..	1.243	1.541	..
Madagascar	0.442	0.482	0.972	1.416	0.641	2.661
Malawi	1.624	2.125	1.090	2.509	2.231	2.546
Malaysia	0.313	0.768	1.090	0.652	0.705	2.305
Maldives	0.192	0.800	..	0.379	0.923	..
Mali	0.373	0.888	0.399	1.295	0.897	1.202
Malta	2.482	1.936	1.333	2.502	1.514	1.393
Martinique	0.196	0.242	0.469	0.610	0.321	1.245
Mauritania	0.733	0.665	1.563	2.649	0.718	4.962
Mauritius	0.682	0.766	1.051	2.145	1.389	2.287
Mexico	0.118	0.507	5.483	0.492	0.694	14.628
Morocco	0.970	0.667	0.658	1.204	0.813	1.373
Mozambique	0.162	0.996	1.961	0.532	1.073	8.586
Nauru	0.587	0.828	0.865	1.666	0.976	2.699

Table 5 (cont'd)
Nominal effective exchange rate instability all countries, periods 1 to 3
 (trade-weighted)

	IMF Measure			Standard Error from Exponential Regression		
	Period 1	Period 2	Period 3	Period 1	Period 2	Period 3
Nepal	5.658	2.289	2.407	10.383	3.253	3.782
Netherland Antilles	0.144	0.964	0.303	0.420	0.803	1.106
Netherlands	0.394	0.524	0.966	0.935	0.638	1.502
New Caledonia	0.622	0.461	0.938	1.889	0.716	2.733
New Zealand	1.362	1.860	2.143	4.339	1.656	5.729
Nicaragua	0.104	0.578	3.443	0.404	0.798	7.493
Niger	0.389	0.517	0.700	1.281	0.584	1.664
Nigeria	0.508	1.670	1.404	1.795	2.033	4.632
Norway	0.744	0.754	1.042	1.590	0.886	3.537
Oman	1.723	1.714	1.347	4.041	1.216	5.455
Pakistan	0.339	13.509	0.929	0.853	23.136	2.899
Panama	1.100	0.516	0.391	0.361	0.712	1.398
Panama Canal Zone	0.063	0.656	0.442	0.099	0.767	1.732
Papua New Guinea	0.300	2.292	1.352	0.511	2.264	2.701
Paraguay	1.023	1.491	2.332	4.096	2.294	9.072
Peru	3.664	0.995	4.998	9.697	1.348	24.968
Philippines	3.951	1.517	1.286	13.555	1.886	2.783
Portugal	0.368	1.204	2.080	1.337	1.255	8.515
Qatar	0.448	1.067	1.451	1.439	0.885	3.705
Reunion	0.227	0.257	0.483	0.685	0.351	1.251
Romania	0.303	2.738	1.843	0.830	2.001	2.742
Rwanda	6.118	1.389	1.457	13.375	1.571	4.350
Samoa	0.849	1.589	3.313	2.668	1.105	4.970
Sao Tome and Principe	0.149	0.632	1.589	0.520	0.694	5.417
Saudi Arabia	0.250	2.344	1.357	0.722	1.703	3.911
Senegal	0.264	0.371	0.527	0.924	0.467	1.343
Seychelles	0.991	0.622	1.218	2.488	1.131	4.108
Sierra Leone	0.560	0.648	1.245	0.870	0.870	3.414
Singapore	0.469	1.334	0.979	1.735	1.011	1.764
Solomon Islands	..	1.085	1.717	..	1.557	3.663
Somalia	0.207	1.343	0.931	0.673	2.084	3.820
South Africa	0.542	2.140	2.062	1.615	3.618	4.170
Spain	1.211	0.825	2.312	3.411	0.695	6.566

Table 5 (concluded)

Nominal effective exchange rate instability all countries, periods 1 to 3
(trade-weighted)

	IMF Measure			Standard Error from Exponential Regression		
	Period 1	Period 2	Period 3	Period 1	Period 2	Period 3
Sri Lanka	2.322	1.508	6.251	4.684	1.455	19.140
St. Helena	..	0.00	0.255	..	0.00	1.117
St. Pierre and Miquelon	0.710	1.340	2.030	2.261	1.731	6.448
Sudan	0.971	1.431	1.901	2.155	2.135	8.062
Surinam	0.213	1.320	1.046	0.801	1.660	3.585
Swaziland	0.601	2.080	2.072	1.576	3.763	4.621
Sweden	0.404	0.594	1.203	1.720	0.834	4.433
Switzerland	0.585	1.301	1.931	1.124	2.136	4.530
Syrian Arab Republic	0.229	1.394	1.536	0.317	1.863	4.483
Thailand	0.192	1.595	1.207	0.685	2.211	4.807
Togo	0.736	0.785	0.906	2.627	0.930	2.667
Tonga	0.483	1.329	3.852	0.973	2.838	13.219
Trinidad and Tobago	1.031	1.281	1.859	3.318	2.102	4.560
Tunisia	0.385	2.101	1.437	0.790	1.749	2.803
Turkey	3.865	1.683	3.748	14.873	2.031	12.881
Uganda	0.418	0.970	1.760	1.439	1.523	2.403
United Arab Emirates	0.393	2.365	1.290	1.302	1.586	4.960
United Kingdom	1.082	1.294	1.627	3.309	2.063	6.226
United Republic of Cameroon	0.547	0.483	0.770	1.775	0.665	2.220
United Republic of Tanzania	0.460	1.221	2.202	1.434	1.825	2.928
United States	0.272	1.026	0.796	1.002	1.378	2.200
Upper Volta	0.390	1.026	0.601	1.376	0.767	1.717
Uruguay	5.597	9.034	2.924	26.986	11.484	10.817
U.S. Virgin Islands	0.163	1.130	0.345	0.508	1.621	1.153
Vanuatu	1.036	1.101	1.476	2.258	1.237	3.852
Venezuela	0.190	0.667	0.459	0.705	0.457	1.589
Viet Nam	6.103	14.576	..	16.376	22.234	..
Yemen	..	4.332	1.074	..	4.408	4.045
Yugoslavia	2.078	3.204	1.483	5.683	4.693	4.110
Zaire	8.189	1.387	6.704	32.000	1.953	17.885
Zambia	0.403	1.850	3.068	1.360	2.287	6.824
Zimbabwe	1.255	3.266	..	3.433	2.609	..

Table 6

Changes in nominal effective exchange rate instability
between 1966-1971 and 1973-1979 periods
 (trade weights)

	Number of countries experiencing		
	Increase	Decrease	Total
<u>IMF Measure</u>			
<u>Developing countries</u>			
Low-income <u>a/</u>	33	6 <u>b/</u>	39
Other	70	15 <u>c/</u>	85
Total	103	21	124
<u>DMEC</u>	22	3 <u>d/</u>	25
<u>Total</u>	125	24	149
<u>Standard Error Measure</u>			
<u>Developing countries</u>			
Low-income <u>a/</u>	33	6 <u>e/</u>	39
Other	76	9 <u>f/</u>	85
Total	109	15	124
<u>DMEC</u>	22	3 <u>g/</u>	25
<u>Total</u>	131	18	149

Notes:

a/ "Low-income" countries for which there are exchange rate data are those defined in the 1979 UNCTAD Handbook: Afghanistan, Bangladesh, Benin, Burma, Burundi, Cape Verde, Central African Republic, Chad, Comoros, Democratic Yemen, East Timor, Egypt, Equatorial Guinea, Ethiopia, Gambia, Guinea, Guinea-Bissau, Haiti, India, Indonesia, Kenya, Lao Peoples Dem. Rep., Lesotho, Madagascar, Malawi, Maldives, Mali, Mauritania, Mozambique, Nepal, Niger, Pakistan, Rwanda, Saint Helena, Samoa, Senegal, Sierra Leone, Solomon Is., Somalia, Sri Lanka, Sudan, Thailand, Togo, Uganda, United Republic of Cameroon, United Republic of Tanzania, Upper Volta, Yemen, Zaire. (Data are incomplete for several of these countries.) Developed countries are: Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Fed. Rep. of., Greece, Iceland, Ireland, Israel, Italy, Japan, Netherlands, New Zealand, Norway, Portugal, South Africa, Spain, Sweden, Switzerland, Turkey, United Kingdom, United States. All others are defined as "other" less developed countries.

Notes to table 6 (cont'd)

b/ Democratic Yemen, India, Malawi, Nepal, Rwanda, Zaire.

c/ Bahamas, Bermuda, Brazil, Colombia, Cyprus, Ecuador, Fr. Polynesia, Grenada, Guyana, Malta, Morocco, Oman, Philippines, Uruguay, Yugoslavia.

d/ Finland, Iceland, Turkey.

e/ Chad, India, Mali, Nepal, Rwanda, Zaire.

f/ Bermuda, Cyprus, Ecuador, Fr. Polynesia, Guyana, Malta, Philippines, Uruguay, Yugoslavia.

g/ Finland, Iceland, Turkey.

by the IMF measure, 48 out of 69 developing countries for which there are data showed increases; measured in terms of the standard error measure, 53 of them did so. Of the 21 lowest income countries for which there are data, 14 or 15, depending on the instability measure employed, experienced increases. Charts VII to XII illustrate the frequency distribution of levels of real effective exchange rate instability in periods 1 and 3 in the same manner as charts I to VI did for nominal instability.

90. As has been seen, it is sometimes suggested (e.g. by Blackhurst and Tumlir (1980)) that nominal exchange rate instability exaggerates the "true" instability in real exchange rates. These data show that not only has real instability risen along with nominal instability between periods 1 and 3 but that the real instability has also been greater than nominal instability in more countries than not during the 1973-1979 period. Table 9 shows that, in developing countries, real effective exchange rate instability is typically higher (68 or 83 cases out of 88, depending on the measure), but that in the developed countries whether this is the case depends upon which measure of instability is employed; when instability is measured in terms of average deviations from trend rather than average monthly fluctuations, the developed countries' real effective exchange rates are, as expected, more stable than nominal ones. 3/ These results imply a substantial degree of short-term instability in domestic price levels which are not merely significantly independent of international influences, but are actually negatively correlated with the price of foreign currency.

91. To some degree, leads and lags in the relationship between price levels and exchange rates could account for some of these results; in particular, they could account for the failure of the IMF measure to generate "expected" results in the case of the developed countries. Data imperfections may also somewhat cloud the interpretation of these data. Still, the fact that real effective exchange rates, as measured here, are so frequently more unstable than nominal ones in developing countries suggests that the "orthodox" presumptions about the relationship between relative price levels and nominal exchange rates cannot

Table 7

Real effective exchange rate instability all countries, periods 1 to 3
(trade-weighted)

	IMF Measure			Standard Error from Exponential Regression		
	Period 1	Period 2	Period 3	Period 1	Period 2	Period 3
Afghanistan	..	..	4.545	..	..	7.858
Algeria	..	..	..	..	..	..
Argentina	3.693	4.143	9.925	9.670	5.304	19.100
Australia	0.520	1.226	2.105	1.587	2.201	3.402
Austria	0.818	1.777	1.157	1.905	2.262	1.795
Bahamas	..	0.970	0.855	..	1.459	1.817
Bahrain	2.152	3.041	2.500	3.857	3.470	3.813
Bangladesh	..	..	5.699	..	..	19.506
Barbados	1.706	1.061	2.075	1.988	1.532	5.796
Belgium	0.793	0.442	0.969	1.827	0.565	1.727
Bolivia	1.591	6.245	3.438	5.211	9.957	10.152
Botswana	..	..	..	..	..	..
Brazil	3.023	0.952	1.469	4.983	1.281	3.225
Burma	..	4.325	5.419	..	7.182	9.103
Burundi	0.865	2.212	..	2.667	2.265	..
Canada	0.503	0.842	1.137	0.817	1.349	3.847
Central African Republic	1.033	0.808	2.725	4.821	2.073	6.336
Chad	1.247	1.250	..	3.010	1.349	..
Chile	9.742	8.645	9.584	7.581	11.011	14.583
Colombia	4.214	0.886	1.658	2.866	1.319	3.662
Congo	1.205	1.437	2.776	3.957	3.095	6.332
Costa Rica	0.731	1.027	2.166	1.083	1.430	3.727
Cyprus	2.352	1.839	1.368	3.331	2.254	2.929
Democratic Yemen	..	..	..	..	..	..
Denmark	1.046	1.208	1.232	1.326	1.310	1.316
Dominican Republic	2.114	2.551	1.422	1.806	2.604	4.336
Ecuador	3.480	1.434	1.914	9.540	2.227	3.088
Egypt	2.527	2.197	5.584	4.497	3.544	14.006
El Salvador	1.478	1.381	3.907	2.572	1.561	15.666
Ethiopia	1.847	2.509	2.744	2.114	2.274	8.078

Table 7 (cont'd)

Real effective exchange rate instability all countries, periods 1 to 3
(trade-weighted)

	IMF Measure			Standard Error from Exponential Regression		
	Period 1	Period 2	Period 3	Period 1	Period 2	Period 3
Fiji	..	2.142	1.408	..	2.736	2.664
Finland	1.841	0.819	1.072	3.522	1.304	4.701
French Guiana	..	..	1.563	..	..	5.206
France	1.127	1.024	1.280	2.639	1.011	3.518
Gabon	0.887	0.811	2.152	1.959	1.263	4.898
Gambia	4.070	5.755	2.968	3.871	4.547	4.675
Germany, Federal Republic of	0.948	0.779	1.478	3.161	0.863	2.789
Ghana	5.569	15.229	6.873	8.465	12.263	20.155
Greece	0.739	1.572	2.446	1.658	1.877	5.499
Guadeloupe	..	..	1.456	..	..	6.125
Guatemala	2.078	1.671	2.675	2.250	2.174	4.098
Guyana	0.994	2.237	1.277	2.191	1.859	4.477
Haiti	2.733	2.652	2.947	3.637	3.316	5.897
Honduras	1.750	1.466	1.218	2.666	2.002	2.323
Hong Kong	2.685	2.487	1.766	2.891	1.992	3.772
Iceland	4.395	2.565	4.696	9.817	5.071	8.365
India	4.634	1.528	1.897	8.645	1.830	4.646
Indonesia	..	3.759	3.364	..	4.841	14.808
Iran	1.111	2.263	1.921	2.201	2.658	3.605
Iraq	1.721	1.449	1.748	3.714	1.211	4.870
Ireland	0.762	1.295	1.291	1.451	1.527	3.168
Israel	2.715	1.457	4.448	4.454	1.810	10.057
Italy	0.467	1.030	1.548	0.844	1.377	3.315
Ivory Coast	3.128	1.181	3.063	4.624	1.211	6.434
Jamaica	1.836	1.730	4.062	3.755	2.816	10.984
Japan	0.447	1.702	1.926	1.195	1.974	7.304
Jordan	..	2.957	3.274	..	3.167	3.844
Kenya	0.973	4.412	2.315	2.898	3.773	4.487
Korea, Republic of	1.637	1.664	2.334	4.416	2.356	4.955
Kuwait	..	..	2.047	..	..	4.985

Table 7 (cont'd)
Real effective exchange rate instability all countries, periods 1 to 3
(trade-weighted)

	IMF Measure			Standard Error from Exponential Regression		
	Period 1	Period 2	Period 3	Period 1	Period 2	Period 3
Liberia	..	1.944	1.770	..	2.322	3.518
Libyan Arab Jamahiriya	2.452	2.720	2.992	6.805	2.312	6.024
Madagascar	1.302	1.329	1.574	3.436	1.946	4.652
Malawi	..	2.823	2.498	..	3.228	3.424
Malaysia	0.715	0.861	1.330	2.023	1.086	2.584
Malta	2.774	2.098	1.630	2.325	1.564	4.284
Martinique	..	..	1.186	..	..	4.479
Mauritania	..	..	2.160	..	..	6.542
Mauritius	1.081	1.019	1.674	1.950	1.792	2.276
Mexico	0.779	0.791	5.449	1.244	0.914	8.438
Morocco	2.623	2.501	3.831	5.540	2.765	7.096
Nepal	5.229	3.762	3.193	10.898	5.331	5.055
Netherlands Antilles	0.351	1.060	1.707	0.847	1.159	2.005
Netherlands	0.912	1.014	1.104	2.541	1.059	2.194
New Caledonia	0.971	0.806	1.642	2.991	2.084	6.094
New Zealand	1.412	2.052	2.353	3.875	2.178	6.715
Nicaragua	..	..	..	..	..	..
Niger	..	3.166	3.225	..	3.575	8.788
Nigeria	1.774	4.272	2.317	4.377	3.539	6.451
Norway	1.109	1.226	1.242	1.634	1.299	3.740
Pakistan	2.202	13.781	1.928	4.317	22.868	5.230
Panama	0.376	0.788	1.136	0.842	1.461	3.970
Papua New Guinea	..	2.269	1.626	..	1.752	3.162
Paraguay	2.261	2.298	5.686	4.232	1.854	8.433
Peru	3.281	1.682	5.327	1.971	1.971	12.537
Philippines	4.003	2.575	1.936	8.592	2.106	5.948
Portugal	1.446	2.066	2.824	4.021	1.506	4.209
Reunion	..	..	1.393	..	..	5.377
Rwanda	6.350	2.305	2.594	12.368	2.483	7.168
Samoa	0.998	1.874	3.826	2.648	1.658	7.706

Table 7 (concluded)
Real effective exchange rate instability all countries, periods 1 to 3
(trade-weighted)

	IMF Measure			Standard Error from Exponential Regression		
	Period 1	Period 2	Period 3	Period 1	Period 2	Period 3
Saudi Arabia	..	3.201	2.706	..	4.173	13.331
Senegal	2.236	2.628	3.603	4.492	3.178	9.577
Sierra Leone	1.961	2.134	2.951	3.717	2.226	4.635
Singapore	0.789	2.776	1.504	1.723	2.973	3.500
Somalia	2.098	2.346	2.617	3.780	2.361	4.224
South Africa	2.077	2.267	2.054	2.254	3.581	3.162
Spain	1.675	1.122	2.532	3.088	1.786	5.494
Sri Lanka	2.361	1.936	6.935	3.926	2.046	18.096
Sudan	6.346	4.451	4.172	9.596	9.421	6.698
Surinam	1.725	1.813	1.867	4.460	2.565	3.855
Sweden	0.604	1.005	1.188	1.981	0.959	3.448
Switzerland	0.635	1.375	1.820	1.321	2.377	4.279
Syrian Arab Republic	2.232	3.328	2.997	5.511	3.298	5.711
Thailand	2.237	1.589	1.546	4.437	2.433	4.160
Togo	..	3.190	3.224	..	4.283	7.255
Trinidad and Tobago	1.077	1.694	2.288	1.689	3.124	5.223
Tunisia	1.495	2.533	1.842	2.703	2.656	5.047
Turkey	3.995	2.303	1.842	15.717	2.837	5.154
Uganda	2.601	1.800	..	4.891	3.364	..
United Kingdom	1.278	1.432	1.760	3.889	2.454	5.050
United Republic of Cameroon	1.435	1.350	1.926	4.893	1.648	4.879
United Republic of Tanzania	1.221	1.791	3.782	2.431	2.808	5.926
United States	0.414	0.891	1.322	1.183	1.100	1.838
Upper Volta	3.323	4.488	7.354	3.538	4.567	11.994
Uruguay	6.238	10.553	3.881	7.046	12.963	8.377
Venezuela	0.417	0.803	1.134	1.465	0.887	2.667
Yemen	..	..	..	..	..	..
Yugoslavia	2.397	3.312	1.800	3.817	5.020	5.311
Zaire	9.292	5.890	8.377	20.637	5.343	13.168
Zambia	3.402	2.761	4.507	9.259	3.246	8.953

Table 8

Changes in real effective exchange rate instability
between 1966-1971 and 1973-1979 periods
(trade weights)

	Number of countries experiencing		
	Increase	Decrease	Total
<u>IMF Measure</u>			
<u>Developing countries</u>			
Low-income <u>a/</u>	15	7 <u>b/</u>	22
Other	33	14 <u>c/</u>	47
Total	48	21	69
<u>DMEC</u>	24	1 <u>d/</u>	25
<u>Total</u>	72	22	94
<u>Standard Error Measure</u>			
<u>Developing countries</u>			
Low-income <u>a/</u>	15	7 <u>e/</u>	22
Other	38	9 <u>f/</u>	47
Total	53	16	69
<u>DMEC</u>	18	7 <u>g/</u>	25
<u>Total</u>	71	23	94

Notes:a/ For country classifications, see table 6 notes.b/ Gambia, India, Nepal, Pakistan, Rwanda, Sudan, Zaire.c/ Brazil, Chile, Colombia, Cyprus, Dominican Republic, Ecuador, Honduras, Hong Kong, Ivory Coast, Malta, Philippines, Thailand, Uruguay, Yugoslavia.d/ Finland.e/ India, Nepal, Rwanda, Sudan, Thailand, Cameroon, Zaire.f/ Bahrain, Brazil, Cyprus, Ecuador, Honduras, Libyan Arab Jamahiriya, Philippines, Surinam, Zambia.g/ Austria, Belgium, Denmark, Germany Fed. Rep. of, Iceland, Netherlands, Turkey.

easily be transferred to the context of developing countries. 4/ This subject clearly requires more country-specific analysis, but the key factors are probably usually the composition of exports and their degree of concentration, as mentioned earlier.

Table 9

Relative instability of nominal and real effective
exchange rates, 1973-1979
(trade weights)

	Number of countries in which		
	Real was more unstable	Nominal was more unstable	Total
<u>IMF Measure</u>			
<u>Developing countries</u>			
Low-income	30	0	
Other	53	5 <u>a/</u>	
Total	83	5 <u>b/</u>	88
<u>DMEC</u>	16	9 <u>c/</u>	25
<u>Total</u>	99	14	113
<u>Standard Error Measure</u>			
<u>Developing countries</u>			
Low-income	25	5	
Other	43	15	
Total	68	20 <u>d/</u>	88
<u>DMEC</u>	7	18 <u>e/</u>	25
<u>Total</u>	75	38	113

Notes:

a/ For country classification, see table 6 notes.

b/ Jamaica, Chile, Colombia, Costa Rica, Mexico.

c/ Australia, Canada, France, Israel, Italy, Japan, South Africa, Sweden, Switzerland.

d/ Argentina, Brazil, Chile, Costa Rica, Ecuador, Egypt, Ghana, Hong Kong, Iran, Jamaica, Liberia, Mauritius, Mexico, Paraguay, Peru, Sri Lanka, Sudan, Thailand, Uruguay, Zaire.

e/ Australia, Belgium, Canada, Denmark, France, Germany Fed. Rep. of, Iceland, Israel, Italy, Japan, Portugal, South Africa, Spain, Sweden, Switzerland, Turkey, United Kingdom, United States of America.

V. SOURCES OF EFFECTIVE EXCHANGE-RATE INSTABILITY AND CHOICE OF PEGS

92. Under the terms of the Second Amendment to the Articles of Agreement of IMF, member countries have considerable freedom as to the means they employ for determining the value of their currencies. At present, of the 139 currencies of member countries listed by IMF at the end of June 1980, 58 were pegged to other currencies, 36 were pegged to baskets of currencies (15 of which were pegged to the SDR), and 5 had other exchange rate regimes, e.g. floating or altering according to "a set of indicators" (see tables 10 and 12A). Only 24 of the 114 developing countries listed did not maintain some type of peg. Economic circumstances in developing countries are generally considered to be unsuitable for the effective operation of floating exchange rates for their own currencies. Their capital markets are usually thin and frequently inefficient; their foreign-exchange markets are also often very thin and the supporting infrastructure not well developed, although this is sometimes the product of governmental foreign exchange controls; and their import demand and export supplies are believed frequently to be quite inelastic with respect to prices (Lipschitz, 1979; Crockett and Nsouli, 1977; Black, 1976; McKinnon, 1979). For these and other reasons, floating would lead to excessive and probably ineffective fluctuations; "the typical developing country ... must peg its currency to some external standard" (Lanyi, 1980, 21).

93. Pegging to "baskets" of foreign currencies like the SDR can also create administrative difficulties in some of the less developed countries, because of the difficulty of staying up-to-date on their precise value in the capital cities of small and poor countries, far removed from the major financial centres; but these problems are only of a second order of importance.

94. In a world of floating exchange rates, to peg to one currency (or basket of currencies) is at the same time to float vis-à-vis other currencies. In 1977, although countries that pegged their currencies usually directed large shares of their trade to the country to which they pegged (see table 10), they still conducted about 40 per cent of their exports with countries which either floated or were differently pegged (Feldstein, Goldstein and Schadler, 1979, 543). In a real sense, then, all countries are floating - even those which have pegged their exchange rates. This can most clearly be seen in the data on effective exchange rates which indicate substantial variations for all currencies.

95. That a country "pegs" the value of its currency in terms of that of another currency does not imply, in an adjustable peg system, that even this exchange rate is a stable one. Indeed, some of the countries which have experienced the greatest degree of overall instability in their nominal exchange rates are categorized by IMF as pegging countries - for example, Chile, Egypt or Jamaica, each of which is ostensibly pegged to the United States dollar. 5/ Many countries that really do attempt to peg their currencies still permit a "band" about the pegged value, so

Table 10

Exchange rate practices of developing countries as of 30 June 1980,
and principal trading partners, 1977

Country and peg	Imports		Exports		Imports as % of GDP
	Major source	Share %	Major destination	Share %	
<u>Pegging to dollar</u>					
Bahamas	US	35.1	US	83.8	64
Barbados	US	25.5	US	32.7	16
Burundi a/*	Belgium/Lux.	18.0	US	44.3	19
Chile	US	31.5	Germany, Fed. Rep.	14.4	36
Costa Rica	US	35.2	US	31.3	109
Djibouti	France	55.0	n.a.	n.a.	69
Dominica	n.a.	n.a.	n.a.	n.a.	25
Dominican Republic	US	44.2	US	79.7	28
Ecuador	US	38.4	US	36.3	31
Egypt*	US	16.4	USSR	23.2	41
El Salvador	US	29.4	US	32.3	14
Ethiopia a/*	US	16.6	US	32.6	7
Grenada b/	n.a.	n.a.	n.a.	n.a.	26
Guatemala	US	39.3	US	33.1	72
Guyana	US	26.9	UK	33.5	28
Haiti*	US	50.8	US	58.4	44
Honduras	US	42.9	US	49.2	24
Iraq a/	Germany, Fed. Rep.	21.2	n.a.	n.a.	33
Jamaica	US	36.2	US	43.7	n.a.
Lao People's Dem. Rep. c/*	Thailand	48.6	Thailand	72.8	74
Liberia	US	26.4	Germany, Fed. Rep.	24.0	32
Libyan Arab Jamahiriya	Italy	27.5	US	39.8	13
Nepal*	India	64.3	India	57.6	38
Nicaragua	US	28.8	US	23.6	34
Oman	UK	23.1	Japan	51.2	19
Pakistan*	Japan	15.2	Iran	7.8	45
Panama	US	30.9	US	45.4	20
Paraguay	Brazil	21.1	Netherlands	15.4	n.a.
Romania	Germany, Fed. Rep.	7.6	Germany, Fed. Rep.	7.3	19
Rwanda a/*	Belgium/Lux.	19.8	Belgium/Lux.	8.5	85
Saint Lucia b/	UK	28.6	UK	54.5	75
St. Vincent and the Grenadines a/*	UK	29.7	UK	75.4	n.a.
Somalia b/*	Italy	32.0	Saudi Arabia	64.1	19.7
Sudan a/*	UK	20.3	Italy	19.7	62
Surinam	US	30.6	US	69.4	44
Syrian Arab Republic	Germany, Fed. Rep.	14.1	Italy	13.2	

Table 10 (cont'd)

Exchange rate practices of developing countries as of 30 June 1980,
and principal trading partners, 1977

Country and peg	Imports		Exports		Imports as % of GDP
	Major source	Share %	Major destination	Share %	
<u>Pegging to dollar</u>					
Trinidad and Tobago	Saudi Arabia	23.8	US	72.3	48
Venezuela <u>a/</u>	US	44.9	US	38.4	29
Yemen*	Saudi Arabia	14.7	Yemen Dem.	39.1	29
Yemen Democratic*	Japan	21.3	Japan	62.6	28
<u>Pegging to pound</u>					
Gambia <u>a/</u> *	UK	24.5	UK	29.8	67
<u>Pegging to French franc</u>					
Benin*	France	23.3	France	24.6	41
Cameroon, United Rep. of*	France	45.6	France	28.3	24
Central African Republic*	France	55.1	France	63.1	n.a.
Chad <u>b/</u> *	France	40.7	Nigeria	20.4	35
Comoros*	France	41.4	France	65.3	n.a.
Congo	France	55.2	Italy	33.9	n.a.
Gabon <u>a/</u>	France	68.8	France	42.1	48
Ivory Coast	France	38.5	France	25.5	36
Madagascar <u>a/</u> *	France	37.3	France	29.3	20
Mali <u>a/</u> *	France	40.1	France	30.8	n.a.
Niger <u>a/</u> *	France	43.4	France	54.0	n.a.
Senegal <u>a/</u> *	France	45.0	France	47.0	34
Togo*	France	34.0	Netherlands	31.6	n.a.
Upper Volta*	France	44.6	Ivory Coast	31.5	43
<u>Pegging to basket</u>					
Algeria	France	24.0	US	51.8	36
Bangladesh*	Japan	21.6	US	14.3	14
Botswana <u>a/</u>	n.a.	n.a.	n.a.	n.a.	73
Cape Verde <u>d/</u> *	Portugal	58.3	Portugal	62.8	n.a.
Cyprus	UK	18.5	UK	28.7	67
Fiji	Australia	27.6	UK	43.3	44

Table 10 (cont'd)

Exchange rate practices of developing countries as of 30 June 1980,
and principal trading partners, 1977

Country and peg	Imports		Exports		Imports as % of GDP
	Major source	Share %	Major destination	Share %	
<u>Pegging to basket</u>					
Kuwait	Japan	19.8	Japan	25.1	36
Malaysia	Japan	23.4	Japan	20.4	42
Malta	UK	25.3	Germany, Fed. Rep.	36.2	101
Mauritania <u>d</u> /*	France	50.0	UK	15.3	44
Morocco	France	27.5	France	24.7	39
Papua New Guinea <u>a</u> /	Australia	46.6	Japan	29.1	44
Singapore	Japan	17.5	US	15.5	160
Solomon Islands*	Australia	31.8	Japan	24.9	37
Tanzania, United Rep. of <u>a</u> /*	UK	13.4	Germany, Fed. Rep.	14.9	25
Thailand*	Japan	32.4	Japan	19.7	27
Tunisia	France	28.1	France	17.9	41
<u>Pegging to SDR</u>					
Burma <u>b</u> /*	Japan	29.7	Japan	13.6	5
Guinea*	UK	16.2	Norway	24.8	n.a.
Guinea Bissau*	Portugal	39.9	Portugal	59.0	n.a.
Iran <u>a</u> /	Germany, Fed. Rep.	18.2	Germany, Fed. Rep.	0.6	11
Jordan	US	14.8	Saudi Arabia	29.8	113
Kenya*	UK	17.9	Germany, Fed. Rep.	17.8	32
Malawi*	South Africa	37.2	UK	44.8	33
Mauritius	UK	15.1	UK	61.7	64
Sao Tome and Principe <u>b</u> /	Portugal	61.1	Netherlands	51.7	n.a.
Seychelles	UK	27.0	Pakistan	57.6	n.a.
Sierra Leone <u>c</u> /*	UK	21.5	UK	61.3	37
Uganda*	Kenya	28.9	US	48.4	4
Viet Nam <u>a</u> /	USSR	37.2	USSR	42.1	n.a.
Zaire <u>b</u> /*	Belgium/Lux.	15.4	Belgium/Lux.	21.9	40
Zambia <u>a</u> /	UK	24.1	Japan	16.3	38
<u>Other</u>					
Afghanistan*	USSR	22.0	USSR	37.5	15
Argentina	US	18.8	Netherlands	10.1	20
Bahrain	UK	19.6	Japan	35.1	n.a.
Bolivia <u>a</u> /	US	25.7	US	34.3	24

Table 10 (concluded)
Exchange rate practices of developing countries as of 30 June 1980,
and principal trading partners, 1977

Country and peg	Imports		Exports		Imports as % of GDP
	Major source	Share %	Major destination	Share %	
Other					
Brazil	US	19.8	US	17.7	8
Colombia	US	35.2	US	28.6	13
Ghana a/	UK	16.5	US	16.7	17
India*	US	12.9	US	11.9	7
Indonesia*	Japan	27.3	Japan	40.2	19
Korea, Republic of	Japan	36.3	US	31.2	36
Lebanon d/	US	12.0	Saudi Arabia	19.4	39
Maldives*	n.a.	n.a.	n.a.	n.a.	n.a.
Mexico	US	63.7	US	67.3	10
Nigeria	UK	22.0	US	41.2	26
Peru	US	29.4	US	20.5	20
Philippines	Japan	25.2	US	35.5	23
Qatar a/	Japan	28.3	US	18.7	n.a.
Samoa	New Zealand	29.2	Germany, Fed. Rep.	45.5	n.a.
Saudi Arabia	US	19.1	Japan	19.0	37
Sri Lanka*	Saudi Arabia	12.1	UK	8.0	21
United Arab Emirates	Japan	20.2	Japan	26.0	40
Uruguay	Brazil	14.1	Brazil	15.9	21
Yugoslavia	Germany, Fed. Rep.	16.3	USSR	21.7	26

Sources: United Nations Statistical Office: Yearbook of National Accounts Statistics, Vol. 2, 1978 (U.N. New York, 1979); United Nations Statistical Office: Yearbook of International Trade Statistics, Vol. 1, 1978 (U.N. New York, 1979); Monthly Bulletin of Statistics, July 1980, Vol. XXIV, No. 7 (U.N. New York, 1980); International Financial Statistics, Vol. XXIII, No. 8, August 1980 (International Monetary Fund); The Europa Yearbook 1980 A World Survey, Vol. 1 and 2 (Europa Publications Limited, London).

Notes: (a) 1976 (e) 1972
(b) 1975 (f) 1971
(c) 1974 (g) 1969
(d) 1973

* "Low-income", as defined in the 1979 UNCTAD Handbook.

that even these "fixed" pegs are not always totally "pure"; this was, of course, normal practice under the Bretton Woods adjustable peg exchange-rate regime.

96. For countries that maintain a peg to a single currency (or fixed basket of currencies), the effective exchange rate can change not only through an adjustment of the level of the domestic currency vis-à-vis the peg currency but also in consequence of changes in the value of the peg currency (or basket) vis-à-vis other currencies of countries with which trade is conducted. Obviously, for countries retaining a totally fixed peg to one currency (or basket) these "third currency" fluctuations are the only possible source of instability in their effective exchange rates. Fluctuations in the value of the peg currency vis-à-vis the currencies of other trading partners are matters beyond the control of national monetary authorities. Worse, they are the product of influences upon the balance-of-payments position of the peg currency country, and these may have little connexion with those relevant to the payments positions of the countries retaining this particular peg. Instability in effective exchange rates caused by these peg currency fluctuations is clearly "externally" created; and should be differentiated from other sources of exchange rate instability.

97. For countries that have pegged their currencies, it is possible to decompose the measured instability of effective exchange rates into their "external" and "other" components, together with a third term which describes the degree to which variations in the two independent sources of instability are themselves correlated with one another. 6/ Thus one term of the decomposition equation describes the instability that would have been generated in the effective exchange rate of the country in question if the hypothetical peg had been retained; and the second describes the actual degree of instability of the home currency vis-à-vis the hypothetical peg currency or numéraire. The third (correlation) term indicates the degree to which "external" fluctuations are offset by compensating movements in the value of the home currency vis-à-vis the numéraire.

98. Using the same methodology and selecting alternative numéraires, it is possible to assess the relative roles of "external" and "other" sources of effective exchange-rate instability in hypothetical circumstances in which alternative choices of peg or numéraire are made. This can be done whether or not the currency in question was actually pegged. Such construction of hypothetical exchange rate circumstances has been undertaken by others as well (Lipschitz, 1979; Crockett and Nsouli, 1978; Frankel, 1975 for example). Like the others, this exercise must assume that all other variables remain at their recorded historical levels, regardless of the hypothesized policies. Since the individual developing countries are not major actors in the world economy, this is not an unreasonable assumption as far as macroeconomic experience is concerned. It also assumes, however, that trade patterns, which are the basis of the weights employed in the effective exchange rate calculations, are unaffected by the choice of peg; except in the short run, this is a little more difficult to justify.

99. These decompositions - actual and hypothetical - have been calculated for the entire sample of countries used in this study. The alternative numéraires for the exercise, each of which were calculated for all countries, were the United States dollar, the SDR, the French franc, the pound sterling, and the European currency unit (ECU). The ECU was included in this analysis, despite the fact that there are no countries which at present peg to it, because of the view expressed in some circles that "... the ECU is likely to provide a powerful pole of attraction for other European, Middle East and African countries for which the Community accounts for a major portion of their total trade. Some of these countries are already looking in fact to the ECU as a potential benchmark for their exchange-rate policies and stabilization endeavours". (Triffin, 1980, 42). For basket currencies like the SDR and the ECU it was necessary to project hypothetical currency values back into periods prior to their actual creation; for the ECU this was a perfectly straight-forward exercise since its definition has not changed, but for the SDR more than one definition has existed, creating even more hypothetical alternative calculations for the statisticians.

100. What precisely is implied by pegging to a basket of currencies, such as the SDR, depends in a fundamental way on the mathematical formulation of the effective exchange rate which is thereby stabilized. Even when the set of weights is agreed, there are different ways of pegging to a particular basket, depending upon whether the effective exchange rate index being stabilized is arithmetic or geometric, and, in the case of the former, how exchange rates are defined (i.e. what is placed in the denominator). Although current measurement and pegging practices in respect of basket definitions like the SDR and ECU involve the use of arithmetic indices, these indices have systematic biases depending upon how exchange rates are defined. All of the present analysis therefore employs the superior - because unbiased - device of geometric indices (Brodsky, 1980).

101. The degree to which a country's effective exchange-rate instability is attributed to "external" factors is in part the product of its own exchange rate policy. If it pegs the value of its own currency to another currency which is relatively stable vis-à-vis the currencies of other major trading partners, the "external" influence will be measured as lower than if it pegs to a more unstable currency. In general, there exists a peg which will minimize such "externally" caused fluctuations in effective exchange rates - and the particular currency or basket of currencies which will achieve this objective is unique to each country and each time period. If the currency floats freely the exercise of decomposing actual effective exchange rate instability, of course, loses its power entirely, but one can still decompose that total instability which would have resulted from various hypothetical pegs, and, as will be seen, this can yield useful and potentially policy-relevant results.

102. A variety of factors influence and constrain the decisions of monetary authorities as to whether and how to peg the values of their currencies (see Black, 1976; Crockett and Nsouli, 1977; Diaz-Alejandro, 1976a; and many others). The fact is that the majority of developing countries have pegged the value of their currencies either to that of

another currency or to a basket of other currencies. 7/ That being so, it is important to assess the changing importance of "external" influences upon effective exchange rate instability, both in respect of the actual pegs these countries have selected and in terms of the major alternative pegs which they might have selected instead.

103. While it may appear that the relative size of the "external" and "other" influences upon total effective exchange rate instability is the prime concern, that is not actually the case. The "other" exchange rate instability is, in fact, a residual category which includes all those changes - whatever their cause - other than those attributable to external currency fluctuations. It can be caused by other external influences, such as terms of trade deterioration, or by domestic monetary policy. It would be surprising indeed if this residual category of instability was not, as a rule, larger than the instability attributable to external currency instability, particularly in times of considerable global economic disorder. Only in those cases where a currency was maintained at an unchanged peg vis-à-vis another currency throughout the period of measurement - in which case the "other" instability in nominal terms is by definition zero - would one expect "external" instability to exceed "other" instability in size; in period 3, this was, in fact, the case for 63 currencies (34 pegged to the United States dollar, some with slight variation permitted; 22 to the French franc; and 7 to the pound sterling). 8/ In the remainder, with rare exceptions, "other" instability dominates.

104. This "other" instability can be very large indeed when measured in nominal terms. It is well known that there have been enormous inflations and devaluations in some developing countries. But these dramatic cases are not the norm. Most developing countries experienced no more "other" (i.e. "internal") instability than did the developed countries during the 1973-1979 period. Since most developed countries floated their currencies, it is not possible to decompose their actual exchange rate instability for purposes of comparison among themselves or between them and the developing countries. It is possible, however, to measure and decompose their exchange rate instability under the assumption that each was pegged, say to the United States dollar or the SDR. During the 1973-1979 period, the most unstable of the major OECD members in respect of this hypothetical effective exchange rate instability caused by "other" factors, under the assumption that a peg was maintained vis-à-vis either the SDR or the United States dollar, was Japan. 9/ Japan's hypothetical experience may therefore serve as a convenient basis for comparing developing countries' experience with that of the major OECD countries. There were only 16 developing countries, together with four minor developed countries, which exhibited greater "other" instability than Japan in this period (see table 11); only seven are "low-income" countries: Bangladesh, Egypt, Indonesia, Mozambique, Sri Lanka, East Timor, Zaire. Most developing countries' currencies experienced stability, vis-à-vis the SDR or the United States dollar, which was within the range of experience of the major OECD countries. Thus the "externally created" instability of their currencies caused by the fluctuations among the major currencies cannot be assumed, except in a few cases, to have been dwarfed by "other" and, specifically internally generated, instabilities.

Table 11

Countries experiencing greater "other"/ (non-externally caused)
nominal effective exchange rate instability vis-à-vis
the SDR than Japan* in the 1973-1979 period
(trade weights)

Country	IMF peg category
<u>Developing countries:</u>	
Angola	not listed
Argentina	other
Bangladesh **	basket
Chile	U.S. dollar
East Timor	not listed
Egypt **	U.S. dollar
Ghana	other
Indonesia **	other
Jamaica	U.S. dollar
Mexico	other
Mozambique **	not listed
Nicaragua	U.S. dollar
Peru	other
Sri Lanka **	other
Uruguay	other
Zaire **	SDR
16	
<u>DMEC:</u>	
Iceland	other
Israel	other
Portugal	other
Turkey	other
4	

* Japan experienced the greatest "internally caused" ("other") nominal exchange rate instability vis-à-vis the SDR (also the U.S. dollar) during the 1973-1979 period of all the developed countries, except for the four listed in this table.

** "Low-income", as defined in the 1979 UNCTAD Handbook.

105. The decomposition exercise demonstrates that in the vast majority of countries that maintained a peg vis-à-vis another currency or currency basket, "externally caused" instability in nominal exchange rates increased between period 1 and period 3; and again, **these** increases were frequently of substantial relative size. This can be

seen in table 12, which shows the number of countries experiencing increases and decreases in externally caused nominal exchange rate instability. In part A, countries are classified according to the IMF's categorizations of pegging practices in mid-1980. (Categorization of countries according to their actual pegging practices can be a hazardous exercise, as has been seen, since some of those which purport to be pegging the values of their currencies in fact vary them more than some of those which are said to be "floating".) In part B, they are classified in terms of their pegging practices during period 1, with all those pegged neither to the French franc nor to the pound sterling shown as if pegged to the United States dollar; part C considers the hypothetical circumstances if all countries had been pegged either to the United States dollar or to the SDR. In the cases of countries which have floated or pegged to original baskets or to lesser currencies, only hypothetical data are offered in this table. Clearly, regardless of actual or hypothetical peg, there have been relatively few countries which have not experienced increased effective exchange rate instability for reasons outside their own control and unrelated to their own circumstances during the floating rate period.

Table 12

Changes in "externally caused" nominal effective exchange rate
instability between 1966-1971 and 1973-1979
(trade weights)

A. According to IMF categorization of pegging practices prevailing on 30 June 1980				
Peg	Number of countries experiencing			
	Total	Increase	Decrease	Not available
SDR	15	12	2	1
U.S. dollar	40	30	4	6
French franc	14	13	1	-
Pound sterling	1	1	-	-
Basket c/	21	17	1	3
Other pegs	3 ^{a/}	-	-	3
Other	45 ^{b/}	-	-	45
Total	139	73	8	58

Notes:

a/ Two to South Africa (rand), one to Spain (peseta).

b/ Of which 21 are developed countries, 24 are less developed countries.

c/ Calculated using SDR as the presumed peg. This can be regarded as an approximation.

Table 12 (cont'd)

B. According to pegging practice in 1966-1971 period, assuming it was maintained unchanged			
	Number of countries experiencing		
	Increase	Decrease	Total
Pound sterling	20 ^{a/}	0	20
French franc	20	3	23
All others (assumed pegged to U.S. dollar)			
Developing countries	81	3	84
DMEC	22	0	22
Total	103	3	106
Total	143	6	149

Notes:

a/ This includes three developed countries: Ireland, New Zealand, Spain.

b/ Chad, Mali, Mauritania.

C. According to assumed peg, either to SDR or to the U.S. dollar			
	Number of countries experiencing		
	Increase	Decrease	Total
<u>SDR</u>			
Developing countries	111	13 ^{a/}	124
DMEC	25	0	25
Total	136	13	149
<u>U.S. dollar</u>			
Developing countries	120	4	124
DMEC	25	0	25
Total	145	4 ^{b/}	149

Notes:

a/ Afghanistan, Barbados, Botswana, Egypt, Falkland Is. (Malvinas)*, Grenada, Guyana, Nepal, Nigeria, Seychelles, Sierra Leone, Sri Lanka, Sudan.

b/ Bahamas, Egypt, Nepal, Trinidad and Tobago.

* A dispute exists between the Governments of Argentina and the United Kingdom of Great Britain and Northern Ireland concerning sovereignty over the Falkland Islands (Malvinas).

106. As has been seen, the choice of peg (actual or hypothetical) can influence the degree of "externally caused" instability as measured in this analysis, and hence both the measured composition of actual instability and total effective hypothetical exchange rate instability. It is possible to assess the increase in "external" instability between period 1 and period 3 by considering what would have happened had each country selected that currency peg or practice which would have minimized "externally caused" effective exchange rate instability. Table 13 summarizes the results of such an exercise in which the options considered for each country are: its actual practice, or pegging to one of the following: United States dollar, SDR, French franc, pound sterling or European Currency Unit (ECU). Even in this hypothetical best possible world, 134 of the 149 currencies for which there are data would have experienced increased effective exchange rate instability between periods 1 and 3.

107. The decomposition exercise reported above permits the assessment of the most appropriate peg from among the various options - numéraire currencies or baskets - there considered, assuming that the object of the peg is to minimize effective nominal exchange-rate instability. For a number of reasons, such analysis is imperfect and must be treated with caution. First, the result is highly dependent upon the weighting system chosen for the calculation of effective exchange rates. Secondly, it does not take account of the direction or denomination of

Table 13

Changes in nominal effective exchange-rate instability between
1966-1971 and 1973-1979, assuming currency pegged (or floated)
so as to minimize "externally caused" instability
in the latter period
(trade weights)

Number of countries experiencing	Developing countries ^{a/}		DMEC ^{a/}	Total
	Low-income	Total		
Increase	31	109	25	134
Decrease	8	15 ^{b/}	0	15
Total	39	124	25	149

^{a/} For country classification, see notes to table 6.

^{b/} Afghanistan, Bahamas, Botswana, Chad*, Egypt*, Guyana, Malta, Mauritania*, Nepal*, Nigeria, Seychelles, Sierra Leone*, Sri Lanka*, Sudan*, Trinidad and Tobago. (Of these, those marked * are "low income").

capital flows, or for those of trade in services. Thirdly, it does not allow for such policy objectives as the diversification of the direction of future trade and capital flows, or the future level of the exchange rate itself.

108. It is nevertheless useful to conduct the exercise in order to obtain some impression of the degree to which pegging practices coincide with appropriate pegs, as measured in this analysis. In table 14 are shown those pegs which, had they been maintained throughout period 3 of the present analysis, would have minimized "external", and hence total, effective exchange rate instability. The nine countries which achieved lower actual effective exchange rate instability than could have been achieved by any of the hypothesized pegs (United States dollar, SDR, French franc, pound sterling, ECU) are classified separately. When trade weights are employed, of the 154 countries for which period 3 data were available, fully 102 of them would have minimized their "externally caused" effective exchange-rate instability by pegging their currency to the SDR. (This is not to suggest that there may not be superior baskets which would have been even more appropriate for particular countries.) The majority of both developing and developed countries minimize their effective instability through an SDR peg. Next in importance, are the United States dollar, which is most appropriate for many countries in the Western Hemisphere that have close trade ties with the United States, and the ECU, which is appropriate for a mix of European, Mediterranean and ACP countries. Table 15, showing the degree to which current pegging practices are "appropriate" for each of the major current pegging categories, indicates that the currencies which are pegged not only to the SDR but also to the French franc are typically appropriately so pegged (only 14 per cent of them are "inappropriate" in each), whereas the majority (63 per cent) of the currencies pegged to the United States dollar would be less unstable if they pegged to another currency, usually the SDR. Table 16 presents the detailed country-level data for those currencies which could have achieved a lower level of "externally caused" nominal effective exchange rate instability during the floating period had they chosen an alternative peg; the last two columns show how much difference the proposed alternative peg would have made. Thus, had Burundi been pegged to the SDR instead of the United States dollar, hypothetical measured "external" instability would have dropped from a variance (about an exponential trend line) of 13.9 to one of only 1.7. Other countries in this list could also have achieved substantial reductions in their externally-created effective exchange rate instability, according to this analysis, through the selection of an alternative peg.

109. It may at this point be worth re-emphasizing the caveat with which this exercise began. Its results are dependent on the underlying assumptions; these may be more appropriate for some countries than for others, and more careful country-specific studies would certainly be required before firm policy conclusions could be reached.

110. Changes in real exchange rates are more important than changes in nominal ones for their effects upon international competitiveness and domestic resource allocation. Policy normally focuses, however, upon

Table 14

Peg that would have minimized "externally caused" nominal effective exchange rate instability in 1973-1979 period (trade weights)

	Developing countries ^{a/}		DMEC ^{a/}	Total
	Low-income	Total		
Hypothetical SDR*	25	79	20	99
U.S. dollar	1	14	2	16 ^{b/}
French franc	7	11	0	11 ^{c/}
Pound sterling	1	4	0	4 ^{d/}
ECU	7	15	2	17 ^{e/}
Actual (other basket, float etc.)	1	8	1	9 ^{f/}
Total	42	131	25	156

Notes:

a/ For country classification, see notes to table 6.

b/ Bahamas, Canada, Costa Rica, Dominican Republic, Haiti, Honduras, Japan, Mexico, Netherlands Antilles, Panama, Panama Canal Zone, Sao Tome and Principe, Saint Pierre and Miquelon, Trinidad and Tobago, U.S. Virgin Islands, Venezuela.

c/ Central African Republic, Chad, Comoros, French Guiana, Guadeloupe, Mali, Martinique, Niger, Reunion, Senegal, Upper Volta.

d/ Bolivia, Paraguay, Saint Helena, Tonga.

e/ Belgium, Benin, Brunei, Cyprus, Falkland Is. (Malvinas)**, Gambia, Gibraltar, Ireland, Malawi, Malta, Mauritania, Mauritius, Seychelles, Sierra Leone, Swaziland, Togo, United Republic of Cameroon.

f/ Austria, Faeroe Islands, Fiji, Guinea-Bissau, Greenland, Grenada, Kiribati, Morocco, Nauru.

* Basket assumed in force throughout the period, rather than only beginning in July 1974; changed in July 1978.

** See corresponding note in table 12.

Table 15

Appropriateness of pegs in terms of capacity for reducing
"externally caused" effective exchange rate instability
by currency of peg, 1973-1979* (IMF categories as of 30.6.80)
(trade weights)

	Number of countries with "inappropriate" pegs (1)	Number of countries pegged to currency (2)	(1) as % of (2)
Pegged to U.S. dollar	25	40	63
Pegged to French franc	2	14	14
Pegged to pound sterling	1	1	100
Pegged to SDR	2	15	13
Total	30	70	43

* See table 19.

the stability of nominal exchange rates, which is more relevant for financial decision-making and much easier to monitor. A case can certainly be made for policy efforts to stabilize real exchange rates, particularly when instability in them is generated purely by external influences. If changes in nominal exchange rates offset relative changes in price levels, the stabilization of nominal exchange rates could, after all, destabilize real ones. If a country were to attempt to "peg" or at least to stabilize its currency in real terms it would continually alter the nominal value of its currency vis-à-vis the peg currency in accordance with the two countries' relative rates of price inflation so as to retain overall purchasing power parity. Obviously, any such policy would also have to take due account of changes in other components of the balance of payments, particularly in the capital account, and to reflect overall changes in economic structure. In practice, this policy could be difficult because of the inevitable lag in the production of price statistics and the ambiguities concerning the relevant price series to employ, but some countries have nevertheless adopted decision rules for the management of nominal exchange rates vis-à-vis the United States dollar that amount to this. 10/

111. A hypothetical real peg implies a corresponding equally hypothetical real float with respect to all other countries. An exercise can be conducted, analogous to that undertaken for nominal exchange rates above, which decomposes real effective exchange rate instability into its hypothetical "externally" generated component, on

Table 16

Countries in which alternative pegs would have reduced
"externally caused" effective exchange rate instability,
1973-1979 (IMF categories as of 30.6.80)

Country	Actual peg	"Better" peg <u>a/</u>	"External" exchange rate instability <u>g/</u>	
			Actual peg	Possible ^{e/}
Burundi	dollar	SDR	13.9	1.7
Chile	dollar	SDR	38.2	16.0
Ecuador	dollar	SDR	15.9	5.5
Egypt	dollar	SDR	7.2	5.5
El Salvador	dollar	SDR	5.8	2.5
Ethiopia	dollar	SDR	11.2	1.1
Gambia	pound	SDR	16.0	7.1
Guatemala	dollar	SDR	4.8	2.7
Guinea-Bissau	SDR	dollar ^{b/}	30.9	24.1
Guyana	dollar	SDR	11.9	1.7
Iraq	dollar	SDR	14.3	2.4
Jamaica	dollar	SDR	4.4	2.5
Liberia	dollar	SDR	15.5	1.8
Libyan Arab Jamahiriya	dollar	SDR	18.3	2.3
Madagascar	franc	SDR	7.1	4.3
Nepal	dollar	SDR	26.2	6.9
Nicaragua	dollar	SDR	6.0	2.8
Oman	dollar	SDR	29.8	7.9
Pakistan	dollar	SDR	8.4	1.3
Paraguay	dollar	pound ^{f/}	82.3	30.1
Romania	dollar	SDR ^{c/}	12.8	1.7
Rwanda	dollar	SDR ^{d/}	20.1	2.6
Sao Tome and Principe	SDR	dollar	22.3	16.7
Somalia	dollar	SDR	13.7	1.3
Sudan	dollar	SDR	22.2	2.9
Surinam	dollar	SDR	12.9	1.2
Syrian Arab Republic	dollar	SDR ^{b/}	22.3	3.3
Togo	franc	SDR	7.1	5.8
Yemen	dollar	SDR	16.0	1.5
Yemen Democratic	dollar	SDR	19.5	2.8
Total of 30				

Notes:

a/ Peg is only recorded as "better" if "external" effective exchange rate instability is lower using all three weighting systems: imports, exports and total trade. Two further countries could be added to the list if improvement in terms of two weighting systems (imports and total trade) were the criterion: Barbados and Benin. Basket pegs other than the SDR were not assessed. SDR refers to the SDR as actually valued during this period.

Notes to table 16 (cont'd)

- b/ Franc would also be an improvement.
- c/ Both franc and pound would also be an improvement.
- d/ Franc would also be an improvement in terms of import and total trade weights.
- e/ Figure is that which would have been achieved had the peg been maintained unchanged vis-à-vis the currency in question. In fact there were devaluations vis-à-vis the actual peg so that the recorded "actual" figure here is not the same as the "actual" effective exchange rate instability caused by "external" influences.
- f/ SDR would also be an improvement.
- g/ Measured as variance about an exponential trend; the comparative data reported here are based on trade-weighted effective exchange rates.

different assumptions as to the currency of the real peg, and the "other" component; and thereby one can derive the "best" peg from among the various options if real pegging is to be undertaken, and assess the degree to which externally generated instability of real effective exchange rates has increased during the period of the floating regime. One can also envisage, as in the case of nominal pegging, a custom-made optimal basket to which to peg, such as Lipschitz and Sundararajan (1980) suggest.

112. This very hypothetical exercise has been undertaken this time without considering the SDR or ECU options because of the extra complexities involved in calculating "price indices" for basket currencies; some of the results are reported in table 17, which is analogous to table 13. It shows, in the case of real effective exchange rates, the change in overall instability between periods 1 and 3 on the assumption that currencies were pegged (to the dollar, franc, pound, or mark) so as to minimize the degree of externally caused real instability in the latter period. Again, increases in effective exchange rates are typical; of 69 developing countries for which there are data, 62 experienced increases in real effective exchange rate instability. Of the 35 countries pegged in mid-1980 to the United States dollar, French franc, or pound sterling for which there were data, 32 of them experienced increases in externally generated real effective exchange rate instability. The only exceptions were Barbados, Egypt and Nepal, all of which were pegged to the United States dollar.

113. The number of developing countries experienced exchange rate instability which cannot be attributed to "external" fluctuations in degrees greater than the Japanese "norm" is much larger when this instability is measured in real terms. There are 28 such developing countries when instability is measured in real terms, whereas there were only 16 (see table 11) when it was measured in nominal terms.

Table 17

Change in real effective exchange rate instability between
1966-1971 and 1973-1979, assuming currency pegged (or floated)
so as to minimize "externally caused" instability
in the latter period
(trade weights)

Number of countries experiencing:	Developing countries ^{a/}		DMEC ^{a/}	Total
	Low-income	Total		
Increase	17	62	22	84
Decrease	5	7 ^{b/}	3 ^{c/}	10
Total	22	69	25	94

a/ For country classification, see notes to table 6.

b/ Barbados, Egypt, Nepal, Rwanda, Sri Lanka, Syrian Arab Republic, Zaire. (Of these, only Barbados and Syrian Arab Republic are not "low-income".)

c/ Austria, Belgium, Denmark.

Generally, measuring exchange rate instability in real terms almost invariably decreases the relative importance of the "external" influences upon instability in the decomposition exercise described above. On the one hand, those countries which retain a fixed nominal peg to one of the major currencies are no longer recorded as experiencing zero instability, which is attributable to "external" effects; on the other hand, those which repegged at different levels and were therefore shown as highly unstable vis-à-vis the currency of peg in nominal terms may have done so to offset price changes and will therefore be recorded as more stable in real than in nominal terms; some of the nominal external instability may also be offset by relative price changes within the countries of the major currencies, even though, as has been seen, in the short-run these price-exchange rate relationships are far from predictable.

114. Those countries which have enjoyed relatively stable real bilateral exchange rates vis-à-vis one of the major currencies (listed in table 18) have done so either through the conscious management of their nominal exchange rate to this end (sometimes in circumstances of substantial domestic inflation necessitating substantial nominal changes in exchange rates, e.g. Brazil and Colombia) or through the maintenance of a stable nominal peg in circumstances where domestic prices moved fairly closely with those of the country to whose currency the country's

Table 18

Developing countries or territories with very low variability of real-exchange rate vis-à-vis some major currencies, 1973-1979

Country or territory	Major currency	Real instability vis-à-vis major currency (squared)	IMF nominal peg categorization (31.3.1978)
Bahamas	U.S. dollar	2.6	U.S. dollar
Brazil	U.S. dollar	9.7	other
Colombia	U.S. dollar	15.5	other
Costa Rica	U.S. dollar	13.7	U.S. dollar
Cyprus	U.K. pound	11.3	basket
Ecuador	U.S. dollar	9.6	U.S. dollar
Fiji	U.S. dollar	13.0	basket
Honduras	U.S. dollar	6.7	U.S. dollar
Hong Kong	U.S. dollar	13.4	(not listed)
Iraq	U.S. dollar	8.6	U.S. dollar
Liberia	U.S. dollar	4.0	U.S. dollar
Malaysia	Deutsche mark	7.3	basket
Malta	U.K. pound	13.1	basket
Mauritius	French franc	13.0	SDR
Netherlands Antilles	U.S. dollar	4.1	(not listed)
Panama	U.S. dollar	14.4	U.S. dollar
Singapore	Deutsche mark	12.6	basket
Somalia*	U.S. dollar	12.8	U.S. dollar
Surinam	U.S. dollar	11.5	U.S. dollar
Thailand*	U.S. dollar	10.4	basket
Trinidad and Tobago	Deutsche mark	13.8	U.S. dollar
Venezuela	U.S. dollar	5.8	U.S. dollar

* "Low-income", as defined in the 1979 UNCTAD Handbook.

own currency is pegged. Very few "low-income" countries (only Somalia and Thailand) achieved such real exchange rate instability vis-à-vis major currencies, although many were nominally pegged to them.

115. It should by now be clear that the instability of effective exchange rates, both nominal and real, has typically increased significantly between the 1966-1971 and 1973-1979 periods. It is also clear that typically there has been a substantial increase in that part of effective exchange rate instability, both nominal and real, which can be attributed to "external" causes (fluctuations among major currencies) in circumstances - usual in developing countries - where the currency must be pegged to an external standard. There is also evidence, though for this more detailed study would be required for confirmation, that some developing countries might have reduced the degree of externally generated exchange rate instability by the selection of an alternative peg for their currencies.

VI. EFFECTS OF INCREASED EXCHANGE RATE INSTABILITY
ON DEVELOPING COUNTRIES

116. Fluctuations in effective exchange rates which are the product of instability of foreign currencies can obviously complicate macro-management in developing countries. If they are large enough, and if there are price or nominal wage ratchets operating, they may even generate more rapid domestic price inflation, and hence depreciation of the domestic currency vis-à-vis its peg currency and the possibility of further inflation in an upward spiral. But any such effects are difficult to verify, and there is no consensus as to their importance, even in the developed countries where there have been attempts at doing so empirically. On other costs of exchange rate instability, however, there is much wider agreement.

117. In the careful words of the 1978 Annual Report of IMF:

"The short-run fluctuations in exchange rates in recent years have ... caused problems for the less developed countries, despite the fact that most of them continue to peg their exchange rates. For those countries that peg to a single currency ... greater exchange rate variability between the intervention currency and other currencies is likely to result in an increase in variability in both the country's effective exchange rate and in the local currency price of its imports and exports. Increased short-run fluctuations among the major currencies also may mean that a less developed country's exchange rate (vis-à-vis countries with which it does an important part of its trade) responds to factors more closely associated with the external position of the country issuing its intervention currency than to its own domestic or balance of payments needs. Some less developed countries have attempted to minimize these problems by switching from a unitary peg to a peg based on a basket of currencies, but many countries find this solution administratively inconvenient, particularly when there is a single dominant currency used in trade and exchange transactions ... The increase in exchange rate fluctuations has also caused problems of portfolio management for the less developed countries ... While the fluctuations in exchange rates have diminished the store-of-value function of some of the major currencies, the rise and variability in import costs have led to a demand for higher and more assured levels of reserves. Those less developed countries that peg to a single currency whose future value is uncertain may therefore face the dilemma that they need to hold larger working balances in that currency, yet they may also wish to diversify their reserves." (IMF, 1978, 39-40).

118. Again, "greater unpredictability of import prices and export receipts in both the short run and the intermediate term ... has made it more difficult for both the public and private sectors to plan their activities, manage their finances, and choose between import suppliers. Moreover, the greater unpredictability of exchange rates in the intermediate term has complicated the task faced by many less developed countries in the management of both their foreign reserves and their external debt". (IMF, 1979, 42).

119. All in all, the new exchange rate regime increases the need for rapid information acquisition and analysis, and places a premium upon quick response and flexibility in production, trade and finance. It therefore places those least endowed with these capacities at a new relative disadvantage - notably poorer countries and smaller firms. These issues will be addressed under the following headings: (a) trade effects - level, pattern, and terms; (b) financial (or portfolio) effects - foreign exchange reserve and debt management.

A. Trade effects

(i) Level of trade

120. Increased variability of exchange rates, other things being equal, will increase the risks involved in international trade and, through its effects upon domestic prices, in particular types of domestic production and consumption, notably tradeable goods and services. It might be argued that more flexible exchange rates, particularly in periods of "crisis" and extreme uncertainty, substitute for other impediments to the free flow of international trade (exchange controls, trade barriers, etc.) - that is, that other things are not equal; but this possibility is difficult to take seriously as a general description of likely alternative events throughout the floating period. Assuming some degree of risk aversion, there ought therefore to be some reallocative effects - diverting production away from exports with their increasingly uncertain prices, and towards non-traded products and, perhaps, import substitutes, prices for which are less influenced by these new uncertainties; and similarly, diverting consumption away from imports and towards non-traded products and, perhaps, exportables.

121. The various devices which may be employed by international traders to cover themselves against foreign exchange risk, which are generally less accessible to those in developing countries (as will be seen below) are, in any case, not without cost. Even when the increased short-term exchange risk of the post-1973 period is effectively covered there still ought to be anti-trade effects arising from the increased risks. Increased exchange rate fluctuation and uncertainty should thus work, other things being equal (and, as noted, it is at least conceivable that they might not be), towards the emergence of more "closed" national economies, reduced international trade, and therefore, most would argue, reduced overall efficiency at both the national and global levels. Even without risk aversion, increased instability of prices muddies the signals upon which efficient resource allocation must be based, and thus is likely to lower overall economic efficiency. Some argue that increased uncertainty as to the permanence of exchange rate changes makes trade and investment responses more sluggish. To the extent that reallocations actually take place in response to price signals - and this will depend upon expectations as to the permanence or transitory nature of changes in them - the increased instability of the prices of tradeables will generate increased pointless (because soon to be reversed) resource allocations; perhaps in the structurally more rigid developing countries the resulting misallocation may be less than in

more price-responsive economies. There may also be disruptions in trade and production which are the product of decisions taken in anticipation of short-run changes in exchange rates, whether or not they actually occur (Richardson, 1980). There are thus clear social costs from the increased uncertainty of prices for traded or tradeable goods - taking the form of less efficient allocation, excess frictional costs, or the opportunity cost of the resources involved in the arrangement of cover against risk.

122. While all analysts agree as to these likely effects, such effects are in fact easy to verify empirically. So many other factors have been in motion during the post-1973 floating rate regime that one simply cannot isolate the effects of increased exchange rate instability alone upon levels of international trade. For many, the extra exchange risk or costs involved in covering against exchange risk seems minuscule in comparison with the other determinants of production, trading and investment activities.

123. From the evidence, it is not clear that in the aggregate the turbulence in foreign-exchange markets has actually significantly affected international trade or investment. Both econometric tests and surveys of businessmen in industrial countries suggest that they have been able to adapt to the new circumstances without cutting back on international activity (IMF, 1979, 37). 11/

124. Large internationally diversified corporations are unlikely to be bothered very much by the short-term volatility of the various currencies in which their international activities are denominated. Their accountants and foreign exchange specialists can easily hedge their positions in each currency if they choose to do so. Indeed, through the familiar process of leads and lags in commercial payments they can and do take positions in individual currencies. Many respondents to the recent survey of multinationals carried out by the Group of Thirty stated that it is worth their while forecasting exchange rates since they can often do so more accurately than the forward markets (whether they actually can do so is another matter entirely); they therefore engage in "selective hedging" (48-9). By doing so, they sometimes create exchange rate fluctuations, or "lead the market". 12/ Thus it should not come as a surprise that this survey of approximately 20 large and sophisticated multinational industrial corporations revealed that their managers do not believe that floating rates have "materially impeded international trade or investment" (6). The general view was that floating rates "had not appreciably raised the costs of conducting business internationally" (45), although some respondents mentioned increased costs of hedging, increased management and staff time devoted to foreign exchange matters, etc. There is some evidence that risk-bearing is compensated by price changes without significant changes in trade volume (Hooper and Kohlhaugen, 1978).

125. For the developing countries, however, the presumptions as to the negative effects are much stronger. How important these increased exchange rate risks are to particular transactors depends upon the

currencies in which their international trade is denominated. Clearly those in the United States incur low and fundamentally unchanging exchange risks because of the dollar's use in the denomination of international trading and financial contracts. To the extent that their international transactions are denominated in other currencies they also would benefit in the same way when their value is fixed in terms of the United States dollar. The international transactions of the developing countries, on the other hand, are denominated in internationally acceptable currencies, only rarely in their own. "For trade between the developed and developing countries, very little pricing is done in LDC currencies. In some cases, involving primary products, dollars or sterling are used; but in most others, the currency of the developed country trading partner predominates." (Magee and Rao, 1980, 370-71).^{13/} It follows that, except in the cases where there is a rigid peg maintained with the currency in which trade is denominated (or where real exchange rate stability is maintained), a much higher proportion of their nationals' transactions is subject to exchange risk than is the case in industrialized countries, where at least some trade (usually exports) is typically denominated in the home currency.

126. The currency in which international trade is invoiced is at present very much a matter of relative bargaining strength. The burden of exchange risk is as much a part of the total "price" of exported or imported goods and services as the unit price at which the transactions are recorded. ^{14/}

127. Generally, there is today a tendency for goods to be invoiced in the currency of the exporter in OECD trade (Carse, Williamson and Wood, 1980; Magee and Rao, 1980, 370; Van Nieuwkerk, 1980; Basevi *et al.*, 1980). ^{15/} Particularly has this been the case with differentiated manufactured products, e.g. machinery and equipment, where exporters possess greater market power (McKinnon, 1979). Exchange risk is thus pushed upon weaker trade partners, and in particular on developing countries. While manufactured goods prices are usually set in terms of one of the two currencies of the transactors to a bargain, in many circumstances - particularly in primary commodity markets - a vehicle currency, usually the dollar and sometimes still the pound, is employed instead (Magee and Rao, 1980). As exchange risks have increased, they are likely to have been shifted disproportionately upon those least able to bargain; in the case of North-South trade, that is, on the developing countries.

128. While one would expect disincentives to trade and the other possible costs of increased exchange rate instability to be greater for smaller firms and smaller countries, this has not as yet been generally verified by empirical testing. Most tests of the effects of exchange rate instability upon trade volume have been inconclusive. There do exist scattered findings, however, to the effect that instability in either real or nominal exchange rates has been correlated with reduced trade in a number of specific, usually semi-industrialized developing countries (Bautista, 1980, 79-80, 83; Rana, 1979; Coes, forthcoming; Behrman, 1976, 185-88; Diaz-Alejandro, 1976b, 64-69).

129. Fluctuating exchange rates may also influence developing countries' trade in less direct ways. The floating rate system was at first generally expected, by encouraging developed countries to maintain relatively free trade and payments systems, to be beneficial to the developing countries relative to conceivable alternatives (e.g. Diaz-Alejandro, 1976). But these very real potential advantages have been somewhat eroded in practice in recent years as protectionism - particularly against developing countries' manufactured exports - has grown; and controls upon private lending to developing countries are threatened. In the sphere of trade, it is even argued that the floating rate regime has reduced the predictability of the protectionist effects of import tariffs and therefore, together with other probably more important factors, has increased governmental proclivities for the use of quantitative controls over imports instead (Nowzad, 1976, 923; Frank, Pearson and Riedel, 1979, 49); these are typically more costly and socially undesirable for both the exporting and importing countries. There is also some evidence, though it has not been systematically assessed, that there may be a tendency for protectionist pressure during temporary periods of exchange rate appreciation to reach levels sufficient to generate new trade barriers which are not then subsequently removed: a "trade barrier ratchet" effect.

(ii) Pattern of trade

130. Other things being equal, one would expect trade patterns as well as trade levels to be influenced by the degree of exchange rate instability and uncertainty experienced in different directions of trade. Thus in a world of fluctuating exchange rates there should be a tendency for countries to trade more in currencies which are relatively stable vis-à-vis the home currency than in those which are not. Generally speaking, and particularly where their import trade is concerned, developing countries' trade with developed countries is denominated in the currency of their trading partners; trade among developing countries is typically denominated in third currencies (dollars, francs, etc.) as well. The implication is that, other things equal, developing countries can be expected to divert their trade toward the countries to whose currencies their own currencies are pegged, when they are pegged. Thus, dollar-pegging countries can be expected to increase the share of their trade which is dollar-denominated and thus which is with the United States; franc-pegging countries may be expected to do likewise in respect of franc-denominated trade and trade with France. Clearly, there is potential for a cumulative self-reinforcing process here; countries are motivated to peg their currencies to those of their principal trading partners, and having done so, they are motivated to trade with these countries even further. When the major currencies float vis-à-vis one another, there can therefore be a tendency for Northern-based currency and trading blocs to develop strength, with all of their attendant disadvantages.

131. Empirical tests of such influences upon developing countries' trading patterns have not been conclusive. Both in statistical testing (Dychter, 1979; Greene, 1980) and in field studies undertaken for the present report, it is apparent that in recent years a variety of other

influences have dominated exchange rate instability as determinants of trade patterns; e.g. longer-term competitiveness as indicated by changes in real exchange rates, market access, credit availability, multinational firms' activity in trade, aid flows, national diversification objectives, altered purchasing or marketing practices, etc. While in future periods pegging practices can still influence trading patterns on the margin, their influence is probably relatively small.

132. Similar arguments apply to financial relationships, for which the data are no more conclusive. The issues surrounding these relationships are considered in the discussion below of reserve and debt portfolio management.

(iii) Terms of trade

133. There is by now ample evidence that domestic currency prices do not instantaneously alter in response to exchange rate changes; that is, purchasing power parity does not hold in the short or medium run, and at the micro-level, the so-called "law of one price" is frequently broken (Isard, 1977; Kravis and Lipsey, 1977; Genberg, 1978; Richardson, JIE, 1978; Bautista and Riedel, 1980). That being so, exchange rate alterations can and do alter the real prices for individual countries' exports and imports, beyond the periods for which contracts have already been concluded. When prices are set in the major trading countries' currencies, as they generally are, depreciation in the value of the currency in which a small country's exports are denominated (say, United States dollars) in relation to those in which its imports are established (say, Japanese yen or deutsche mark) implies an unexpected and involuntary deterioration in its terms of trade. Increased instability of key currency exchange rates therefore implies increased instability in developing countries' terms of trade, at least for those countries in which exports and imports are denominated in different currencies. Obviously, there are usually other far more important influences upon short-term instability of developing countries' terms of trade; on the other hand, exchange rate fluctuations can cause significant effects by themselves.

134. If exchange risk diminishes importers' demand or exporters' supply, there may be consequent compensating price effects; there is evidence of such price "compensation" for risk-bearing in United States international trade, even though, because of short-term inelasticities of foreign supply and demand, there is no apparent effect of exchange risk upon trade volume (Hooper and Kohlhagen, 1978). Where developing countries possess market power - say in some exports - one might expect, on this basis, some increase in export prices to offset any declines in trade volume. But individual developing countries are usually price-takers, not only in their imports but also in their export trade, and most of their exports are, in any case, highly inelastic in their supply, so that favourable changes in their terms of trade in partial compensation for increased exchange risk are exceedingly unlikely. 16/

B. Financial effects**(i) Foreign-exchange reserve management**

135. Field investigations confirmed the frequently expressed view that the increased short-term instability of exchange rates has created difficulties for the managers of foreign-exchange reserves and public debt in developing countries. Even in the more advanced of these countries the necessary financial experience and expertise for effective portfolio management was frequently found to be lacking. In the smaller countries, with a few fortunate exceptions, these problems have been particularly serious. Scale diseconomies in the management function and the infeasibility or expense of acquiring up-to-the-minute information in these countries increase the difficulty of achieving effective managerial responses to short-term changes; and these countries are usually in any case particularly deficient in the relevant expertise. The risks in the financial sector can be regarded as the product of nominal rather than real exchange rate fluctuations. 17/ In some countries, substantial losses have been realised on foreign-exchange reserve accounts for several years in succession.

136. The post-1973 "managed" floating rate regime has left opportunities for monetary authorities to intervene in various ways in foreign-exchange markets even when they are not seeking to peg the value of their currencies. Contrary to some purist academic expectations, there has therefore been a continuing foreign-exchange "management" role and a continuing need for foreign-exchange reserves. As has been seen, many developing countries in any case continue to peg the value of their currencies in terms of others. Indeed, the increased variability of developing countries' receipts and payments which is implicit in the increased variability of effective exchange rates would require, assuming unchanged demand and supply functions, higher reserves in order for currency-pegging countries to achieve the same domestic macro-economic objectives (Williamson, 1976, 79). In practice, however, any such increased reserve requirements would seem to be very small. This conclusion derives both from theoretical analysis (Williamson, 1976) and empirical testing (Heller and Khan, 1978). The latter found that non-oil developing countries' reserves were actually higher in the post-1973 period than would have been predicted by a demand function estimated from the pre-float period, but that reserve holding behaviour did not alter in a statistically significant manner. 18/

137. Rough rules of thumb for reserve management can be devised and have sometimes been applied; currency composition of reserves can be related, for instance, to that of the import bill or the external debt or projected deficits, or some combination thereof. There have certainly been systematic patterns and changes over time in the composition of foreign-exchange reserves, and these are related to the choice of peg, trading patterns, and longer-run exchange rate prospects (Heller and Knight, 1978). There is obviously a need for more developing country expertise in this area. Careful analysis of the relative merits of alternative rules of thumb for utilization by those

whose limitations in managerial capacity are likely to continue could also be productive (see Ben-Bassat, 1980). There is also obvious merit in attempting to pool expertise and information systems among the smaller countries, perhaps on a regional or sub-regional basis.

(ii) Debt management

138. Similar issues arise in respect of the problems of debt management. The currency composition of debt is much more likely to be the product of chance than is the case with reserves. While much of the developing countries' debt is fairly long term, the servicing is ongoing and gives rise to recurrent short-term payments obligations; increases in short-run exchange rate instability therefore imply increased risks in this sphere just as in trade and reserves.

139. At present, the foreign-exchange risk inherent in all external finance is forced almost exclusively onto the borrower. Bilateral lenders, with very few exceptions, lend in their own currencies; financial institutions such as the World Bank and Eurocurrency banks match assets to liabilities in each currency.

140. Even in otherwise ideal circumstances, countries borrowing externally must expect to take some risk. Except for the larger and more commercially creditworthy, however, the developing countries have very little control over the extent or the precise character of that risk. Its management is made especially difficult for the smallest and least "creditworthy" countries - the majority of developing countries - by such factors as the following:

- (a) For them, the currency composition of the external debt at any one time is given and cannot normally be altered - that is, finance is not normally available to them to refinance external debt in different currencies;
- (b) These countries normally cannot choose which currencies to borrow except on a very long-term basis by shifting trade, aid and financial relationships;
- (c) In relatively small countries, single externally-financed projects can be large enough to have a significant or even dominant effect on the country's external debt, so that if such a project is financed in one currency the country can be dangerously exposed to adverse movements in that currency.

141. These difficulties are worsened when a country gets into balance-of-payments difficulties, as many developing countries have done in recent years. Countries faced by a sharp deterioration in their balance of payments are likely to borrow more externally, and, because long-term external finance on soft terms cannot normally be increased suddenly, borrow on harder terms. At the same time, they are in a weaker position to choose which currencies to borrow (except, to some degree, in terms

of the currency mix of payments arrears); indeed they frequently have no choice at all; and, in the crisis of financing a deficit in order to keep the economy going, they are less likely even to consider the currency of new loans. As a result, the currency composition of the external debt of a poor country which has been or is going through a balance-of-payments crisis is likely to be largely accidental rather than the result of financial planning.

142. While the currency composition of the total external debt obviously matters, it is rather the currency composition of each year's debt service that is relevant to short-run policy and practice. The latter tends to be dominated by short-term debt unless a country has been fortunate enough to borrow abroad exclusively on concessional terms. There are such countries, but balance-of-payments crises tend to push countries into rapid accumulation of short-term debt; so countries with debt-service problems are also likely to be those which have recently and rapidly, without adequate opportunity for careful planning, acquired a lot of short-term foreign debt. These problems arise whether short-term debt is acquired because of an adverse shift in the country's terms of trade, or because of the launching of questionable and inappropriately financed projects at a faster pace than the country can manage or afford, or because of some combination of the two.

143. There is a striking shortage of international, and sometimes even national, statistics on the currency composition of foreign debt and foreign-debt service, implying a general lack of awareness of the problem. Private or multilateral facilities for avoidance or spreading of currency risk in external borrowing, or for refinancing inappropriate currency mixtures of debt, have only just begun to appear.

VII. THE MANAGEMENT OF EXCHANGE RISK IN DEVELOPING COUNTRIES

144. Instability and uncertainty in respect of exchange rates, both nominal and real, have increased significantly in the developing countries under the new international floating-rate regime. Increased instability and uncertainty as to the values of the major world currencies have created new risks, and therefore costs, which are the product of external forces entirely outside the control of developing countries' national economic policy-makers. These externally-originating risks are additional to those major ones created by export commodity price fluctuations (the product of fluctuations in foreign demands and supplies), changes in import prices, technological change, shifts in the expectations or preferences of foreign private and public owners of capital, and uncontrollable influences over domestic export supplies. The latter remain overwhelmingly the most important sources of "shock" and risk in the macro-economic management of the developing countries (see UNCTAD/UNDP, 1979). Increased foreign-exchange risks are nevertheless, by themselves, potentially important influences upon welfare, allocative decisions, and development. It is therefore important to consider the possible means for protection against them and/or their possibly deleterious effects.

145. Governments and private decision-makers in developing countries, at lower levels of income and wealth, have reason to be, if anything, more risk-averse than those in richer countries. It is ironic that they nevertheless have less adequate means of protecting themselves against risk. Already frequently buffeted by primary commodity price fluctuations, unstable weather, and their domestic economic effects, they can also expect to encounter more difficulties than their counterparts in more fortunate countries in covering themselves against exchange risk in a world of turbulent exchange rates. This is not merely because of their disadvantages in respect of relevant information or predictive ability; these can, after all, at least in principle, frequently be purchased from specialists.

146. As far as private firms in developing countries are concerned, there may not be any forward market facilities available to them. By and large, the developing countries have still "not yet been integrated in international forward markets: with ... few exceptions [e.g. the Mexican peso] ..., the currencies of these countries are only quoted and traded abroad on an ad hoc basis. There is but little interest in them, since they are rarely used in international payments. Moreover, in certain cases the major multinational banks tend to be sceptical regarding existing exchange rates and apprehensive that, owing to restrictions applied, they might be unable to cover their transactions" (Gerakis and Danker, 1977, 29; also see Miller, 1976). IMF reported in 1973 that their needs "may require development of forward market facilities that are now non-existent or rudimentary in many less developed countries, either through provision of new services by their own financial institutions or through improved access to forward market facilities in the main financial centres, or both" (IMF, 1973, 32). The provision of forward cover to private traders is also likely to serve the national interest, both by "improving the signals" for private decision-making and by protecting the real value of the nation's foreign-exchange earnings. Where international trade is undertaken by government-owned corporations, the latter factor is obviously the dominant one. Seven years later, forward facilities, while, according to some, "appreciably improved" (Gerakis and Danker, 1977, p.1) are still inadequate in most developing countries. Where central banks have "made markets" - more usually for exporters where they can sometimes provide hidden subsidies, than for private importers - they have themselves obviously been faced with new exchange-risk problems in the management of their expanded portfolios. Where they have not, and where private market facilities are permitted, they have frequently been inhibited from developing by inadequate telecommunications, shortages of local expertise, and remaining exchange controls.

147. At year-end of 1979, of the 116 developing countries and territories for which the IMF annually reports information on exchange arrangements, only 25 were reported as having forward facilities (IMF, 1980). A few others, like Bahrain and Hong Kong, not specifically mentioned in this respect in this source, also have forward markets. These varied widely in institutional arrangements, maturities covered, types of transactions for which cover was permitted or provided, foreign currencies for which rates were quoted, bid-ask spreads, and the role of the monetary authorities (see table 19). The most extensive official

Table 19

Developing countries and territories with forward foreign-exchange markets and principal market characteristics: 31 December 1979

Country or territory	Principal market characteristics
Argentina	Private sector. Up to 360 days.
Bahrain <u>a/</u>	Commercial banks permitted.
Bangladesh	Banks and authorized banks. For exports and imports. Dollars, pounds, marks, yen. Up to 6 months.
Brazil	Banks and authorized banks. Up to 180 days.
Colombia	Bank. 6 months or 1 year. U.S. dollars. (interest-bearing exchange warrants).
Costa Rica	Bank. U.S. dollars. 90 days.
Cyprus	Bank and authorized dealers. For trade transactions only. Dollars and pounds. Up to 6 months.
Egypt	For foreign-trade transactions.
Hong Kong <u>a/</u>	Commercial banks permitted.
India	Bank and authorized dealers. Dollars, pounds, marks, yen, Asian monetary units. Up to 12 months for dollars and pounds, 6 months for marks and yen. For specified exports, up to 10 years.
Indonesia	Bank and authorized banks. U.S. dollars.
Jordan	Permitted.
Kenya	Bank and commercial banks. Dollars and pounds. Up to 6 months.
Korea, Rep. of	Bank and foreign-exchange banks. Up to 1 year among banks and for non-residents; 6 months for resident non-banks.
Malaysia	Commercial banks permitted.
Mauritius	Bank. For export processing zone industries and sugar sector. Up to 6 months.

Table 19 (cont'd)

Country or territory	Principal market characteristics
Mexico	Bank. For selected transactions.
Morocco	Bank. For exports and imports of non-consumption items.
Nigeria	Authorized dealers. Up to 6 months for imports; no limit for exports.
Pakistan	Bank and authorized dealers. U.S. dollars, Asian monetary units, and specified currencies. Limited period.
Peru	Bank. Foreign exchange certificates bearing interest. Up to 360 days. <u>a/</u>
Philippines <u>a/</u>	Bank and authorized commercial banks. For exports and specific investments.
Singapore	Commercial banks permitted.
Sri Lanka	Bank and commercial banks. U.S. dollars. Up to 6 months.
Tunisia	Bank. U.S. dollar, French franc, deutsche mark.
Uganda	Authorized banks. For exports or imports. Up to 3 months or with approval for longer.
United Arab Emirates	Bank and commercial banks. One week, one month and 3 months. Maximum limits.
Zimbabwe	Commercial banks permitted. For exports and imports only. No limits.

Source: IMF, Annual Report on Exchange Arrangements and Exchange Restrictions, 1980 (Washington, D.C., 1980).

Notes:

a/ Information from different sources from that of the rest of the table.

b/ At that time, Southern Rhodesia.

forward operations reported are probably those of the Reserve Bank of India which offers forward cover to "authorized dealers" in four currencies (United States dollar, pound sterling, deutsche mark, and Japanese yen) and Asian monetary units, for periods up to 12 months (six for marks and yen); and, since mid-1974, "in respect of specified capital and producer goods, for periods up to ten years from the date of conclusion of the export contract" (p. 191). Coverage in the IMF Report is not uniform and may well be incomplete; one study estimated that forward facilities were actually available in 1977 for as many as 40-45 developing countries (Gerakis and Danker, 1977, 30). But it appears safe to say that the majority of the developing countries, and particularly the smaller and poorer ones, do not have forward facilities of any description. Even those that do, often have very limited coverage; there is no information as to the extent of usage of these facilities in developing countries.

148. The particular problems encountered by the weaker developing countries' governments and central banks in covering themselves against substantially increased short and medium-term exchange risk, and therefore in providing cover for their citizens, have not always been fully appreciated although most would recognise that exchange risk is more costly for some transactors than for others. Where there is a need to cover an exposed future (short-term) position in particular national currencies, there is generally the possibility of resort either to forward markets, or to the spot markets in foreign-exchange together with international borrowing and lending opportunities (financial hedging). This route is an easy one in the industrialized countries where the foreign-exchange and security markets are most developed and the foreign-exchange controls least limiting. For a number of reasons, however, developing countries are in a relatively disadvantageous position in respect of operations in this market.

149. Bid-ask spreads, which are generally believed to have risen since the world moved to floating exchange rates (McKinnon, 1979, 21-22) and which rise further in times of particular turbulence (Gerakis, 1977, 21), vary with the customer and with the maturity. They are lowest, and the cost of forward cover is therefore the lowest, for customers who are the best credit risks (because of the possibility that the transactor will not be there at the date of maturity), whose transactions are the largest, who generate the most ancillary business, and who are the best-informed about the market; according to the Group of Thirty's survey, international oil companies can get "interbank spreads or even better" (20). Similar generalizations can be made about the cost of acquiring insurance against foreign-exchange risks through various bank-arranged insurance schemes. Thus, small private firms and small developing countries' governments, as those with the least creditworthiness, smallest transactions, least ancillary business prospects, and least information, are those likely to incur the highest charges for protecting themselves against foreign-exchange risk.

150. In developing countries' trade with developed countries, there are likely to be further costs because of the typically longer duration of the period between contract and delivery for which forward cover is

required (see Carse *et al.*, 89). Spreads rise markedly with the length of the forward contract, and forward markets thin out dramatically for maturities beyond those (six months) typically required for the finance of intra-OECD trade. It is also likely that the "offer risk" period - that between the offer and the contract, frequently more than three months in the experience of Federal Republic of Germany exporters (Gehrmann *et al.*, 83) - is longer for developing countries; and for that there is generally no means of covering at all. There is evidence that in recent years the availability of forward cover for periods of over one year has been further reduced as some of the smaller London banks which specialized in this portion of the market have been unable to handle the increased risk (Group of Thirty, 4). "Longer dated forwards in some currencies are still obtainable for five and even ten years, but not easily and only in limited amounts" (Group of Thirty, 35).

151. In short, financial markets have not provided the breadth or depth of forward facilities that their more enthusiastic supporters expected. Exporters in many industrialized countries (and a few less developed ones) can purchase long-term insurance against exchange risk from governmental export credit agencies; but such facilities are obviously not open to "outsiders".

152. As has been seen, crucial to the burden of exchange risk is the currency denomination of commercial and financial contracts. Generally, contracts in North-South transactions are denominated in the currency of the relevant Northern transactor, with the result that exchange risk is pushed entirely upon the Southern party to the contract.

153. The unit of account in international trade may be arranged so as to achieve a fairer distribution of exchange risks by such devices as contractual provision for price changes in response to subsequent exchange rate changes, the splitting of the price into two (or more) separate currency components, the use of an agreed third vehicle currency (or, in earlier days, a "gold-clause"), flexibility as to the date of payment, or the use of an artificial basket currency unit. In some cases, local traders are provided with transactions entirely in their own currency by foreign buying or selling agents who, in effect, for what may be a stiff price, manage their exchange risks for them. While data on the prevalence of these arrangements are imperfect, such devices do not so far seem to have been of great relative significance in developing-country trade. Their prospects may be greater in cases of large, longer-term contracts - particularly those with an element of political content.

154. While there are some developing countries which are firmly within the dollar or franc monetary areas in the sense that most of their trade in both directions is denominated in one currency, for the majority of developing countries, export prices are fixed in terms of far fewer currencies (usually predominantly in dollars) than are their import prices. The pricing of their exports in terms of some composite unit of account which better reflects the structure of their payments obligations, commercial as well as financial, would certainly ease their problems with increased exchange risk.

155. Similar innovations in international financial accounting could ease some of the problems of exchange risk in developing countries' debt and reserve management. For instance, the World Bank has recently introduced an exchange risk pooling system to reduce what had been an arbitrary and capricious distribution of exchange risks among its borrowers (World Bank, 1979, 28-29). This had resulted from the fact that, although loans were denominated in dollars and interest rates on these "dollar" loans were uniform, borrowers actually received currencies in accordance with the chance circumstances of the Bank's recent borrowings and the decisions of its portfolio managers; servicing obligations were then incurred in the borrowed currencies, regardless of subsequent alterations in exchange rates, and the Bank also determined the order in which these currencies were to be repaid. The Bank thus not only passed all of the exchange risk on to its borrowers but also did so in a peculiarly erratic fashion. Particularly in the case of smaller countries, where a "natural pooling" through large or repeated borrowings could not take place, the degree of one country's exposure in any one currency could be high. Indeed, where the Bank lent to development finance companies or agricultural credit institutions which themselves on-lent their funds, without accepting any exchange risk, the sub-borrowers could not even know in advance what currency their borrowing was going to be in; understandably, this made them unwilling to borrow through these channels. The Bank took steps in 1979 toward meeting the requirements of the latter sub-borrowers through a prior commitment that half of the funds would always be in dollars, with the other half in yen, marks or Swiss francs. During 1980 the Bank introduced a currency-pooling system which, while not lowering overall risks, will at least share them equitably among the Bank's borrowers. The system involves providing the same basket of currencies to all of its clients. 19/

156. The new pooling system still does not address the problem of exchange risks associated with outstanding World Bank debt, although it might have done so. Nor does it address the fact that the Bank's managers appear to earn profits for the Bank by passing on to its borrowers at standard rates of interest those currencies most likely to appreciate which have been borrowed at lower interest rates while maintaining higher-yield dollar assets in its (probably oversized) liquid reserve; the possibility of reducing the effective interest rate on Bank borrowing through alternative financial management practices certainly deserves further exploration.

157. The current pooling arrangement does not reduce overall exchange risk for borrowers; it merely spreads more equitably among the borrowing countries that risk which flows from the Bank's own management practices and the course of international financial events. An obviously simpler means of spreading and even reducing risks for borrowers, and potentially reducing effective interest rates as well, would be the total conversion of the World Bank - both its borrowing and its lending - to an SDR basis. IMF accounts and lending are already denominated in SDRs. Virtually identical comments apply, pari passu, to the activities and possibilities of the regional development banks. The Inter-American Development Bank plans to introduce a risk-pooling scheme similar to that of the World Bank, and the Asian Development Bank has also been studying the problem.

VIII. REDUCING RISK THROUGH THE USE OF BASKET CURRENCY UNITS (SDRs)

158. Their limited and costly domestic and international facilities for forward cover and their limited bargaining capacity in international commercial and financial negotiations suggest that developing countries might be disproportionate gainers from the use of suitable currency "baskets" (or, as some call them, "cocktails" or "artificial currency units" (cf. Aschheim and Park, 1976)) for the denomination of contracts. The relative stability which a basket offers will most assist those without cheap alternative means of defence against currency fluctuations.

159. As has been seen, predictability is not the same as stability. While a basket of currencies may be more stable 20/, the information required to forecast accurately its future value in terms of some national currency may be considerably greater than in the case of single vehicle currencies. Interest in the SDR will therefore be greater in countries where there is greater diversification of currencies in international transactions (Chrystal, 1978, 21). At the same time it will be particularly useful for the smaller transactors who have the most difficulty acquiring a diversified portfolio.

160. The SDR is not the optimal basket for all developing countries; strictly speaking, it is probably not optimal for any country. Least of all is it appropriate for those whose trading and financial connexions do not coincide with the weights within its particular basket (for example, see table 10). It is nevertheless the leading candidate for increased international acceptability and use as a basket. This is both because it has the widest degree of acceptability already (Gold, 1980, 20-44) and because its composition does roughly approximate an "optimal" basket for the "average" member of the International Monetary Fund. As has been seen, as far as trade patterns are concerned, the SDR constitutes a better basis for pegging by most developing countries than the major national currencies or the European Currency Unit (ECU).

161. Following an initial burst of interest shortly after the currency crisis of the early 1970s, there was a decided lull in the development of currency baskets, which have included some other than ECUs and SDRs, in international financial markets. A small number of private banks first offered SDR-denominated deposits beginning in 1974-1975, and there were several bond flotations in ECUs and SDRs, in the mid-1970s. Various intergovernmental bodies began at the same time to denominate in SDRs their international transactions in air transport, Suez Canal dues, the Universal Postal Union, and a number of other international conventions. The SDR became the unit of account for the African Development Bank, the Economic Community of West African States, the Nordic Investment Bank and Nordic Inter-Central Bank payments agreement, and indirectly for the Arab Monetary Fund (1 dinar = 3 SDRs), the Asian Clearing Union, and the Islamic Development Bank (see Gold, 1979 and 1980). In OPEC the question of pricing oil in terms of SDRs; the Guyana Bauxite Company actually announced its intention to price bauxite in them; and various shipping companies in Scandinavia began to employ them as well.

162. No doubt, the failure of the SDR to emerge as the world's major source of increased liquidity in subsequent years (Brodsky and Sampson, 1980) carries primary responsibility for the failure of this movement subsequently to "take off". Explanations for this usually, however, contain several other strands. First, interest in the SDR or other baskets is a function of expectations as to the future value of the principal vehicle currency, the United States dollar; as the dollar recovered in the late 1970s the interest in alternative units of account correspondingly diminished. There is undoubtedly something in this argument, although the use of the dollar has still declined (Magee and Rao, 1980, 370-71). But it now appears that, far from there being only one major vehicle currency in which an overwhelming proportion of international transactions is denominated, there now exists a whole hierarchy of vehicle currencies and major and minor non-vehicle currencies, with the dollar still at the top, in any of which transactions may be made (Carse, *et al.*, 1980; Magee and Rao, 1980; Scharrer, 1979). The prospects for the dollar are not therefore necessarily the only or even any longer an important determinant of the future of currency baskets.

163. Second, the SDR and other baskets seem an extremely inconvenient and complex means of denominating contracts for firms and institutions which do not maintain their accounts in the same basket currency units. A few institutions now do maintain their books (most notably IMF) with SDRs and the others mentioned above. Private companies still do not. Were oil pricing to be shifted to some basket currency - the SDR has repeatedly been suggested - there would arise obvious incentives for the oil companies to reconsider the preferred manner in which they denominate at least some of their assets and liabilities, and keep their accounts. It has been argued that simpler baskets than those on offer would raise the likelihood of their use in private contracts, that the five-currency basket for the SDR, which replaced a 16-currency one in 1981, will increase significantly its popularity. Hambros Bank, for instance, introduced a 6-currency basket, BASE, in January 1980, which was intended to approximate the SDRs movements. On the other hand, it may be that the computer software for the efficient handling and conversion of quite complex currency baskets into whatever accounting, cover and decision-making systems one wants, have now been developed; and therefore that complexity, *per se*, is no longer such a major issue. 21/

164. Third, the currency baskets do not offer significant advantages to major borrowers or investors. If risks are to be spread among many currencies, large multinational corporations or institutions prefer to develop their own, more appropriate, "personalized", cocktails; portfolio management is not a matter easily to be turned over to some rigid intergovernmental "fixed throttle" formula-maker (Jaque, 228-9). Where yields or borrowing costs can be improved through self-managed foreign-exchange departments, basket clauses carry little appeal, and there may be self-preserving bureaucratic interests operating in the denigration of basket denominations as well. Within firms on the margin between paying the costs of foreign-exchange managers and opting for currency baskets in their balance sheets, those who make their living from running foreign-exchange departments can be expected to lean

towards the former; it is revealing that some independent sources of advice on the management of foreign-exchange risks are much more enthusiastic about the use of currency baskets for their clients than are foreign-exchange managers themselves.

165. Fourth, there exist no SDR clearing systems. While this is strictly irrelevant to the possibility of using the SDR as an accounting unit, it is administratively much easier to work with dollars; "... it would be inefficient to use one instrument as a numéraire when another already fulfilled the role of an international money in all other respects" (Chrystal, 16). Moreover, it has been argued that currency cocktails are at a significant disadvantage in comparison with the major vehicle currencies in that there are no forward markets for them. In principle, however, there are implicit SDR and ECU rates of interest and forward rates, which are the weighted averages of those of the constituent currencies (Polak, 1979, 630-31). Except for a few of the minor currencies of the basket it is possible to cover an SDR position by appropriate placements and transactions in individual currency markets. That it may at present be bothersome and costly is beyond dispute. Interest rate quotations on SDR-denominated assets should help to overcome this problem, but one still requires active two-way transaction possibilities in SDR assets. Were there more financial and commercial SDR or ECU-denominated trade, one could expect the development of forward quotations in basket form.

166. In the past two years or so there has been a re-emergence of interest in SDR-denominated contracts. Among the factors which may explain this are: continuing key currency instability and uncertainty, growing familiarity with the idea of currency baskets, and the development of computer technology for their handling, the attempt to develop a substitution account and the discussion of SDR-denominated assets related thereto, the emergence of the ECU and official efforts to promote its use, the 1977 repeal of United States legislation which inhibited United States banks in this sphere (Gold, 1979, 47) and, possibly, renewed oil surpluses with the renewed search for "acceptable" financial instruments for the handling of vast recycling needs. There are now at least 30 commercial banks in 12 financial centres offering SDR-denominated deposits (see table 21) as against only about half a dozen in mid-1978. The Bank for International Settlements also accepts increasing numbers of SDR-denominated deposits. IMF now records in its bi-monthly Survey the (average) interest rate on three month SDR-denominated deposits in European, North American and Japanese banks. The aggregate volume of these deposits is hard to assess but may already have risen to 3 billion SDRs or so. Depositors now include international oil companies as well as international institutions and developing country central banks. After a lull in 1976-1977, basket currency units (European units of account and SDRs) have been increasingly employed in international bond flotations in 1978-1979 (see table 20). Following the 3 SDR-denominated bonds issued in 1974 (Alusuisse International, Sveriges Investeringsbank, Electricité de France), there were no further issues until November 1978. In the next two years, there were five further SDR-denominated issues (Svergies Investeringsbank, Nordic Investment Bank twice, Svenska Handelsbanken, and the Republic of Finland). As in 1974, Crédit Suisse First Boston

Table 20

Public offerings of international bonds in composite
currency units, 1976-1979
(U.S. million dollars)

	1976	1977	1978	1st three quarters 1979
European units of account	102.7	33.5	202.8	176.4
SDRs	-	-	32.1	106.6
Total	102.7	33.5	234.9	283.0

Source: World Bank, Borrowing in International Capital
Markets, Third Quarter, 1979 (EC-181/793), pp.84-86.

(formerly White Weld) has been prominent in their management. Early in 1981, the Government of Sweden became the first sovereign government to undertake a large (\$ 1 billion) syndicated commercial bank loan denominated in SDRs; the syndicate was led by Morgan Guaranty Trust. At roughly the same time, a group of major international banks in London decided to begin issuing and trading in SDR-denominated certificates of deposit. More international lending institutions are employing SDRs as their unit of account, including the International Fund for Agricultural Development (IFAD) in 1978 and the International Development Association in 1980. These are still relatively small stirrings but they indicate that the SDR is alive, and potentially available for at least some of the developing countries' needs.

167. Whatever the possible merits of the present flexible exchange rate system, developing countries have been disproportionately discomfited by it. If the present turbulent system is that which the world intends to maintain, it is important to offer better protection to those with the greatest difficulty living with it.

168. The present conjuncture presents an opportunity for a quantum leap towards increased use of the SDR or other currency baskets, through decisions which can be taken by some developing countries on their own initiative. The projected OPEC surpluses of \$ 115 billion in 1980 and similar amounts in 1981 must somehow be effectively recycled; and the search is now on to devise means of achieving more equitable while no less efficient results than "the market", as at present constituted, is likely to generate. Non-oil developing country deficits are projected

Table 21Banks now offering SDR-denominated deposits

<u>Amsterdam</u>	Algemene Bank Nederland Amsterdam-Rotterdam Bank
<u>Brussels</u>	Kredietbank Société Générale de Banque
<u>Paris</u>	Banque Nationale de Paris Crédit Lyonnais Société Générale
<u>Frankfurt</u>	Deutsche Bank
<u>New York</u>	Chase Manhattan Bank Chemical Bank Manufacturers Hanover Trust Company
<u>London</u>	Hambros Bank Barclays Bank Crédit Suisse First Boston Keyser Ullman Scandinavian Bank Samuel Montagu Bank of Nova Scotia Standard Chartered Bank Manufacturers Hanover Trust Company
<u>Copenhagen</u>	Den Danske Bank Privatbanken
<u>Helsinki</u>	Postipankki
<u>Oslo</u>	Andresens Bank Christiania Bank Den Norske Creditbank
<u>Stockholm</u>	Svenska Handelsbanken
<u>Tokyo</u>	Bank of Tokyo Dai-Ichi Kangyo
<u>Vienna</u>	Gironzentrale

Source: IMF.

at \$ 70 billion in 1980 and perhaps even more in 1981. New financial instruments may be created by IMF to assist in the process of intermediation; whatever other characteristics they may possess, they will be denominated in SDRs and so will the loans to which they give rise. One must wish the IMF well in its efforts to develop a new facility but, if experience is any guide, it will not finance a large proportion of the recycling requirements. What of the rest? In particular, what are to be the characteristics of the financial instruments employed by the commercial banks as they recycle oil surpluses to developing countries? And, if the World Bank plays a role in this process through increased subscriptions of capital and expanded borrowing or, as the Brandt Commission has recommended (p.274), increased gearing in its lending activity and further development of co-financing arrangements, what kinds of borrowing and lending agreements is it to make? If the oil-surplus countries develop new financial institutions of their own, what will their instruments look like?

169. The surplus countries are in a position, both in their own institutions and in their negotiations with private banks and inter-governmental financial institutions, to achieve major improvements in the way in which exchange risk is handled for developing countries, and ultimately for the rest of the world as well. They can do this by insisting that significant proportions of their assets and therefore of the developing countries' liabilities, particularly those of the poorest and smallest, be denominated in SDRs. Not only can they achieve this in direct developing-country placements with their own financial institutions, and in direct World Bank placements, but they may thereby encourage World Bank bond marketing in SDRs in other markets as well. Private banking responses to the expression of OPEC preferences in this regard may be a matter for speculation; present levels of competition in international banking suggest, however, that they would be swift. There are no extra risks involved in this for OPEC; on the contrary, provided that adequate interest rates are offered on SDR-denominated assets, such changes should please risk-averse investors.

170. At the same time, it would be helpful, at last, for the oil-exporting countries to denominate oil prices in a less unstable vehicle than the dollar. The decision to switch to SDR-denominated prices on the part of the OPEC countries - long suggested, and most recently also recommended by the Brandt Commission (p.279) - would not only achieve the objective of stabilizing a little the price of energy both for producers and consumers, but would also accelerate the process of denominating more financial instruments in terms of SDRs. Oil companies which have already shown interest in such instruments, would in that case certainly expand their involvement in this segment of financial markets.

171. In other primary commodity markets, producers' associations might also be stimulated to act similarly - and would profit from the experience of the firstcomers in this area. Co-ordinated action to denominate primary commodity contracts in basket currencies, while leaving price levels unchanged, could, for the poorest and smallest countries, in effect mean a partial stabilization of their real

commodity prices. Such action should not arouse Northern antagonisms, since it may well be in the mutual interest of consumers and producers. Northern governments may therefore be more willing to co-operate on this element of international commodity reform than on others on which they have been less forthcoming. In the International Rubber Agreement, 1979, for example, prices are denominated in terms of the Malaysian ringgit, a currency which is pegged to a basket of foreign currencies.

172. Obviously, similar changes in the denomination of developing countries' import contracts should also be sought wherever possible and where, as in the case of standardized products whose markets are competitive, offsetting price increases can be avoided. The governments of the industrialized countries could support the SDR denomination of export contracts directed at those developing countries that would most benefit from them, and desire them, by offering - or even favouring - SDR cover in their exporters' exchange-risk insurance programmes.

173. The denomination of more trade and financial contracts in SDRs would reduce the degree of short-term exchange risk incurred by those developing countries with the least capacity to protect themselves against it. For those countries that already peg the value of their own currencies to that of the SDR, the use of SDR-denominated contracts would significantly reduce the short-term exchange risks of all private traders as well as of the country as a whole, and return individual and sectoral-specific exchange rates to the control of the monetary authorities. Increased availability of SDR-denominated contracts might thus also offer further impetus toward the pegging of national currencies to the SDR. As more developing countries pegged to the SDR, the short-term stability of their exchange rates vis-à-vis one another would also be stabilized.

174. Support for a deserving "infant currency" - made more possible by the accident of oil surpluses - would be so potentially beneficial to the interests of the developing countries and ultimately to the world monetary system as a whole that the IMF could sensibly offer information, technical assistance and perhaps more direct support to all who may require it in the process of change towards increased SDR denomination. The market, in the form of the private commercial banks and the Bank for International Settlements, has begun to offer attractive "baskets", in the form of SDR-denominated deposits carrying full commercial rates of return, for easier reserve management on the part of the developing countries most in need of such help. IMF might be induced to play a more "activist" role in encouraging and supporting SDR use by, for instance, offering deposits denominated in SDRs, particularly to central banks but perhaps also to commercial ones, at market-related interest rates (just as the Bank for International Settlements does). 22/ The creation of discounting facilities for longer SDR-denominated maturities and the creation or facilitation of SDR clearing arrangements are also possible areas for IMF initiative. These possibilities have been spelt out at greater length in an earlier report to the Group of Twenty (Williamson, 1980; see also Habermeier, 1979).

175. IMF should also continue to expand the number of institutions designated as "other holders" of SDRs, which are thereby authorized to buy and sell, borrow and lend SDRs themselves, as freely as IMF member governments.

176. Still another area for IMF action lies in the sphere of international law. The legal niceties of SDR denomination - whether its value is to be measured in terms of the original basket at the time of the contract, the possibly redefined basket at future dates during its term, or some combination of the two - would also benefit from some standardized approaches, such as could be promoted by IMF (Gold, 1979; Silard, 1979). While it may still seem a little visionary, IMF could even begin to analyse and experiment with alternative means of developing an SDR that maintains its real value in terms of goods and services, rather than just in terms of other currencies.

177. The furtherance of the SDR as the basis for the international monetary system is certainly within the present mandate of IMF. Opportunities such as that created by the current recycling requirement do not come frequently. One must not play down the importance of the many other crucial elements of a development and/or recycling package which could serve the global interest in these difficult times. But, notwithstanding these other elements, it should be possible to forge an alliance of oil-exporting countries, developing countries, IMF, and forward-thinking and innovative private and public financiers to achieve a breakthrough towards increased SDR use - at least in accounting as a first step - and thus to bring about a reduction of the disproportionate burden of exchange risk now borne by the weakest members of the international community.

IX. GENERAL CONCLUSIONS

178. The post-1973 exchange-rate system of managed floating for the world's major currencies has been characterized by substantial increases in short-term exchange rate instability for the vast majority of countries and, in particular, for most developing countries. This new and, to some extent, unexpected turbulence in foreign-exchange markets is manifest in measures of instability of both nominal and real effective exchange rates. While the 1973-1979 period has been one of considerable international economic disorder in other respects, this increased exchange-rate turbulence can safely be regarded as the product of the new exchange-rate system. The demerits of the previous adjustable exchange-rate peg system, particularly that of periodic crises fueled by speculative capital flows taking advantage of the speculators' knowledge of a one-way option for rate adjustments, have evidently been replaced by the problem of exchange-rate turbulence, the product of the conversion of currency markets into just another set of asset markets on which private expectations and speculative enthusiasms establish short-term prices.

179. While the major currencies float, most developing countries are forced by the character of their economies to continue to peg their

currencies in terms of some external standard, either a foreign currency or a basket of foreign currencies like the SDR; increasingly, they have chosen to peg to baskets rather than to individual currencies, but there remain substantial numbers of dollar- and franc-pegging countries. Pegging to an external standard in the new exchange-rate system implies continual changes in effective exchange rates, both nominal and real, which are purely the product of fluctuations among foreign currencies, and which are therefore unlikely to be correlated in any way with the needs of the local economy. An overwhelming majority of developing countries have experienced increases in such externally-caused effective exchange rate instability during the post-1973 period - some of substantial dimensions. Moreover, they would have experienced such increases regardless of their choice of peg.

180. Externally-caused exchange rate fluctuations are by no means the most important of the external "shocks" which generate problems for macro-economic management and development in developing countries. Nor has it even been possible to estimate with any precision the cost in terms of resource misallocation, the terms of commercial or financial exchange, overall welfare, or increased exchange-rate fluctuations in the developing countries. (This deserves more detailed country- and industry-specific research.) It is nevertheless possible to say that the post-1973 exchange-rate system has certainly not, as some observers have suggested, been without cost to the developing countries.

181. Apart from the domestic effects of increased exchange-rate uncertainty, imperfections in international financial markets have always made it both more difficult and more costly for traders and financiers from developing countries to cover themselves against foreign-exchange risk. There is a clear presumption that the increased foreign-exchange risks under the post-1973 exchange-rate regime have been passed disproportionately on to the developing countries.

182. For these reasons, there must be considerable unease over the functioning of the present international exchange-rate regime. It has unfortunately not yet been possible to approach the objective of "an exchange-rate regime which, while flexible, is capable of promoting adequate stability" (Group of Twenty-four, 1979, III, 2b). Increased flexibility of exchange rates has been achieved; stability has not. Some reforms of the current exchange-rate regime which would be in all countries' interests could be particularly beneficial to the developing countries. To the extent that the developing countries are disproportionate "losers" from short-term exchange-rate turbulence, they would be disproportionate "gainers" from measures which achieve smoother changes in exchange rates and fewer disruptions and less disorderliness in foreign-exchange markets. This is not the place for another exposition of the various proposals intended to achieve these ends (e.g. short-term capital controls, crawling pegs, reference rates, etc.) which have been in circulation for years. Renewed efforts, however, to address these issues more successfully do seem now to be called for. Also of both general interest and particular interest to developing countries would be measures to increase the depth and breadth of forward markets, a matter which has so far received remarkably little attention from IMF or its individual members.

183. On some matters, the developing countries not only have an interest but also some independent capacity to implement reform. Particularly useful to the smallest and poorest developing countries, but also to the third world as a whole, would be the increased use of basket currencies, notably the SDR, in commercial and financial contracts. It is noteworthy that another recent report to the Group of Twenty-four, on alternatives for monetary reform (Williamson, 1980), reached parallel conclusions.

184. The use of basket currencies in the developing countries' own international transactions could reduce significantly the degree of foreign-exchange risk - particularly for those countries lacking the scale or the expertise, or both, to construct their own "baskets" to achieve the same purpose - by reducing the degree of short-term instability in the value of the foreign exchange in which the developing countries must deal. The basket which at present has the greatest degree of acceptability, although it still has a long way to travel in this regard, is the IMF's SDR. It has long been the view of the developing countries that the SDR should become the principal source of international liquidity and the cornerstone of the international monetary system; moves to increase the use of the SDR in international contracts seem likely to further this objective, as well as to alleviate some of the immediate problems of the present exchange-rate system.

185. Not only can the developing countries, and above all OPEC, unilaterally insist on pricing their exports in terms of SDRs, but they can press for increased SDR usage in other transactions as well. Their demand for SDR-denominated financial assets has already generated some response from commercial banks and the Bank for International Settlements. Presumably they could also generate increased interest and activity in SDR-denominated commercial bank lending and bond flotations. The World Bank and the regional development banks could be pressed not only to convert to SDR-denominated borrowing and lending in the future, but also to refinance past lending in terms of SDRs at the borrowers' option. With further effort, perhaps achieved through collective initiatives, or through Northern governmental support, it may even be possible to increase the degree to which developing countries' imports are denominated in SDRs. There seems to be a strong case for a more "activist" IMF role in stimulating the accounting use of SDRs - not only through information dissemination but also through such devices as the provision of deposit, discounting and clearing facilities - and it should be pressed in this direction.

186. Obviously, some developing countries will be more interested in the possibility of SDR-denominated commercial and financial contracts than others. Those with close links to particular industrialized countries and the intention of maintaining them will prefer to retain the present (usually dollar or franc) currencies of contract. The more developed among the developing countries may also prefer to "play the market" with existing currencies, rather than attempt to reduce foreign-exchange risks in this manner; the extent to which they do so will depend upon the terms on which SDR-denominated contracts are made available, and every effort should be made to reduce any premia which the "suppliers"

of SDR-denominated contracts may be tempted to try to charge. What is proposed is not the replacement of the present vehicle currencies, which would in any case be totally unrealistic, but, rather, the creation of an important new set of options which will immediately be especially valuable to the poorer developing countries, but could also eventually contribute to the achievement of wider systemic reforms in the role of the SDR, which would be in the interest of all developing countries and in the global interest.

187. While each individual country should be studied in greater detail than has been possible here, the evidence suggests that there may be a number of instances in which particular developing countries could reduce the extent of externally-caused effective exchange rate instability by altering their currency peg, usually to the SDR or some other basket of currencies. Fluctuations among the developing countries' own currencies would obviously be minimized if they all chose the same basket to which to peg, and, though not optimal for all countries, the SDR could be a convenient basis for such policies. The merits and demerits of joint developing-country pegs to the SDR deserve more study.

188. In the meantime it is clear that the developing countries, particularly the poorest of them, could benefit from increased research and technical assistance in several areas in which the post-1973 exchange rate system has generated new difficulties for them. Financial management capacity in many countries has not kept up with the increased complexity of foreign-exchange markets, although the new communications technologies ought to make it possible for them at least to acquire more efficiently the relevant information for better management. The development of better information systems and suitable "software" for better reserve and debt management in the developing countries should therefore be a matter for urgent attention. The functioning of forward markets and other means for covering foreign-exchange risk, both at national and international levels, has not been carefully studied from the standpoint of the needs and possibilities of developing countries, either individually or as a group. Data on the currency composition of developing countries' assets and liabilities, and external trading arrangements, are still woefully lacking. In these areas, IMF should be urged to expand its activities, and the central banks of the developing countries should consider, through their joint organizations, the possible advantages of collective research, information collection, and action.

FOOTNOTES

1. The first allocation of SDRs was in January 1970, at which time it was defined to have a value of exactly U.S. \$ 1. Following the U.S. devaluation in December 1971, the value of the SDR rose to \$ 1.08571. At the time of the second dollar devaluation in February 1973, its value rose to \$ 1.20635, and it remained at this level until July 1974. Since that date its value has been calculated by reference to a basket, originally of 16 major currencies, with the basket itself being altered in mid-1977, and then of only 5 currencies from the beginning of 1981. Following the general convention, in the period 1966-1969, the value of the SDR has been taken to be \$ 1.
2. Because of the fact that, particularly in the adjustable peg period, changes in exchange rates are "bunched" around fairly small values and quite large ones, their distribution is likely to be non-normal, in the statistical sense. The standard deviation of these changes is therefore not always the best summary measure of variability for the purpose of an inter-period comparison. There is some evidence (Rana, chapter 2) that the standard deviation measure may understate the increase in exchange rate variability as between the adjustable peg and managed floating periods (See also Farber, Roll and Solnick, 1977).
3. Using slightly different methodology and earlier data, Kenen also found that real short-term exchange-rate instability exceeded, on average, nominal such instability in industrialized as well as developing countries during the post-1973 period. The degree to which real instability exceeded nominal instability declined in 1974-1976, however, relative to that in the pre-float period (Kenen, 1979, 30).
4. There seems to be no basis in fact, at least as far as month-to-month change is concerned, for the recent pronouncement that "While nominal exchange rates fluctuated widely after 1973, the calculated real effective exchange rates have been much more stable." (Blackhurst and Tumlin, 1980, 35 in mimeo version).
5. The IMF classification system is based on the member countries' rules regarding intervention in foreign-exchange markets, a system which the IMF itself has said can be "a misleading guide as to the actual policy being followed" (IMF, 1976, 24). An alternative basis for classification has been suggested, which considers the relative weight placed on exchange rate and reserve movements in dealing with foreign-exchange market problems (Holden and Suss, 1977; Holden, Holden and Suss, 1979).
6. This can be shown as follows:

$$\text{Var (EER)} = \text{Var}(Q^*) + \text{Var}(\text{EER}^*) + 2 s (\text{EER}^*) \cdot s (Q^*) \cdot R_{\text{EER}^*, Q^*}$$

where $\text{Var}(Q^*)$ is the variance of the home country currency vis-à-vis the peg currency; $\text{Var}(\text{EER}^*)$ is the variance of the peg currency vis-à-vis third countries with which the country in

question trades (weighted); s is the relevant standard deviation; and R is the correlation coefficient between EER^* and Q^* . $Var(EER)$ is the variance of the effective exchange rate of the home country currency. A number of measures of instability can be decomposed in this manner but the IMF measure which has been employed above cannot (Brodsky, forthcoming). (A crude version of such an analysis was nevertheless reported in the IMF Annual Report, 1979, 42). The present decomposition exercise has therefore been undertaken solely in terms of the standard error measure employed above.

7. Some considerable success has been realized in predicting pegging behaviour on the basis of various country characteristics (Holden and Holden, 1976; Dreyer, 1978; Heller, 1978) such as size and direction of trade.
8. SDR pegging began during the period in question so that measurements covering the entire period do not show any constant pegs to the SDR.
9. Japan's total trade value was also second only to that of the United States.
10. There are also theoretical reasons why stabilizing real exchange rates may be undesirable. Domestic supply shocks will generate price effects which are better not reflected in nominal exchange-rate changes; reserves should in this case be employed to cushion the aggregate supply effects at an unaltered exchange rate.
11. The overall empirical evidence is surveyed in Artus and Young, 1979, 681-684. One recent study of 16 advanced countries did, however, uncover some statistical evidence of a negative correlation between capital formation and exchange-rate volatility (Kenen, 1979, 41-2).
12. While changes in their asset preferences may generate exchange rate fluctuations, these companies' own intra-firm goods flows are unlikely themselves to react significantly to such fluctuations.
13. Detailed data on the currency composition of developing countries' trade are rarely available; such information as there is often either originates with developed country trading partners or is quite impressionistic.
14. In principle, there exists a set of national currency prices which could exactly offset the exchange risks perceived by "the average" risk-averse trader in invoicing in terms of each of them (Rao and Magee, 1979, 64-65); in practice, however, prices are established via a variety of other influences, unrelated to exchange risk, and this equilibrium set is unlikely to be found.
15. Occasionally, however, as has been the case of the Federal Republic of Germany, the strong prospects of the importers' currency generated exporter preferences which coincided with importers' preferences for the use of their own currency (Gehrmann et al., 85).

16. While longer-run currency realignments cannot be blamed primarily or, many would say, at all upon the more flexible exchange-rate regime, there is evidence that in recent years their particular direction, specifically the declining value of the U.S. dollar, in which much developing country export trade is denominated, has imposed transitory but nevertheless serious terms-of-trade losses upon many developing countries. Each of a sample of eleven developing countries in a recent study, in which prices in vehicle currencies are assumed to be independent of exchange-rate changes, experienced terms-of-trade losses because of exchange-rate changes between 1970 and 1979, with the deterioration concentrated in the 1971-1974 and 1977-1979 periods (Riedel and Bautista, 1980). Some of these estimated losses may only be "theoretical" in that they depend on fixed trade patterns. If trade flows were altered in response to the new structure of incentive, losses would obviously be lower; but trade patterns are usually fairly slow to alter, and probably this is especially so in less developed countries, in the face of longstanding customer relationships, long-term ties of ownership, uncertainty and limited information and/or scanning capacity. Although in some cases these estimated losses were quite large (in Thailand, Indonesia and Colombia the terms of trade were estimated as deteriorating by over 10 per cent because of exchange-rate changes), they were nevertheless dwarfed by other influences upon the terms of trade.
17. For a more detailed exposition on exchange risks in financial markets, see Wihlborg, 1978.
18. There were also other factors tending to raise their reserve requirements, notably the requirements imposed by Eurobanks on their developing country borrowers and the increased instability of primary commodity and key developing country import prices.
19. The possibilities of differential interest rates and of changes in currency allocations were also considered (World Bank, 1979, 28-9).
20. Even this is only a high probability rather than a certainty, since individual currencies may remain stable while instability in other components of the basket disrupts the value of the basket.
21. The new five-currency basket, by raising the weight in the total of the U.S. dollar, may also be seen as a step back toward increased dollar usage rather than toward increased basket use.
22. IMF could invest the proceeds in a variety of currencies and cover itself against exchange risk just as any other bank would. With more SDR-denominated liquid assets of their own, central banks could more easily offer similar SDR-denominated deposits to domestic commercial banks, which would thereby be encouraged to do the same for their individual clients (Chrystal, 1978, 25-6).

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ANNEX

CHARTS RELATING TO EFFECTIVE EXCHANGE-RATE INSTABILITY

CONTENTS

- I. Nominal effective exchange rate instability in Period 1:
all countries
- II. Nominal effective exchange rate instability in Period 3:
all countries
- III. Nominal effective exchange rate instability in Period 1:
developing countries
- IV. Nominal effective exchange rate instability in Period 3:
developing countries
- V. Nominal effective exchange rate instability in Period 1:
developed countries
- VI. Nominal effective exchange rate instability in Period 3:
developed countries
- VII. Real effective exchange rate instability in Period 1:
all countries
- VIII. Real effective exchange rate instability in Period 3:
all countries
- IX. Real effective exchange rate instability in Period 1:
developing countries
- X. Real effective exchange rate instability in Period 3:
developing countries
- XI. Real effective exchange rate instability in Period 1:
developed countries
- XII. Real effective exchange rate instability in Period 3:
developed countries

Chart I
NOMINAL EFFECTIVE EXCHANGE RATE INSTABILITY IN PERIOD 1:
ALL COUNTRIES

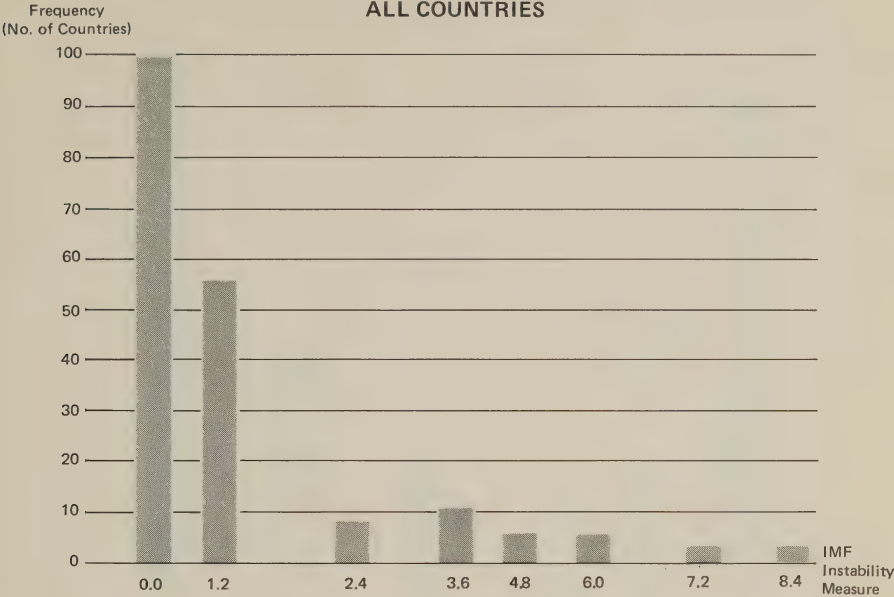


Chart II
NOMINAL EFFECTIVE EXCHANGE RATE INSTABILITY IN PERIOD 3:
ALL COUNTRIES

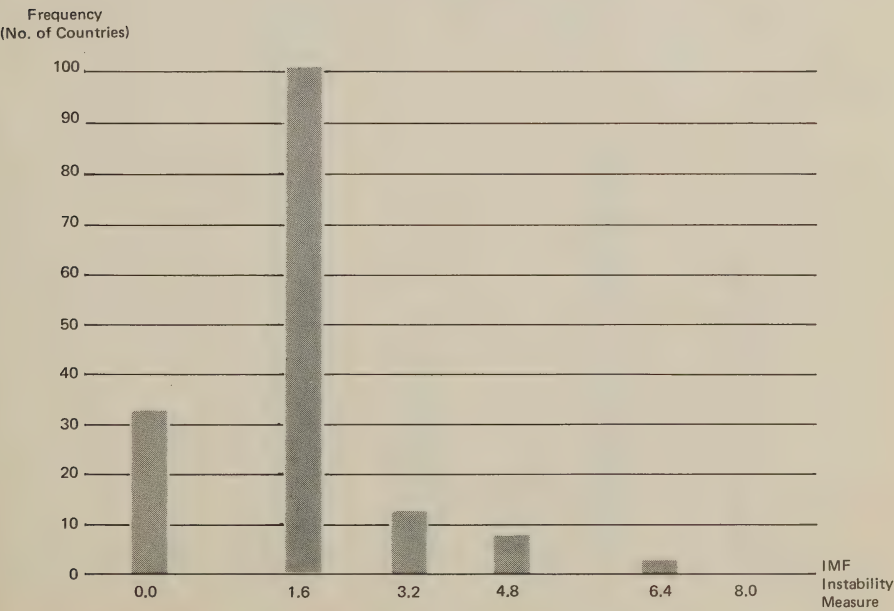


Chart III

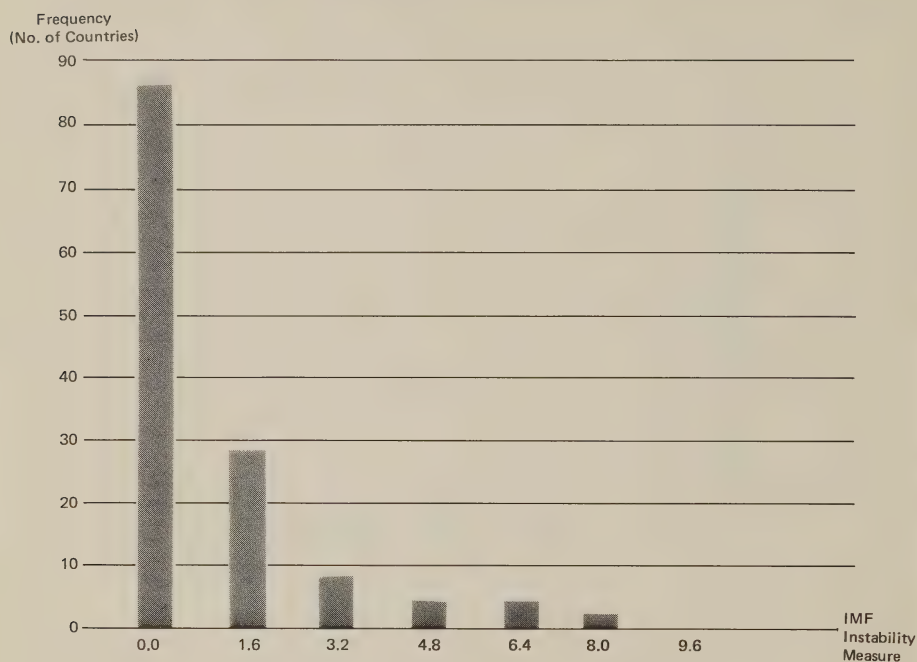
**NOMINAL EFFECTIVE EXCHANGE RATE INSTABILITY IN PERIOD 1:
DEVELOPING COUNTRIES**

Chart IV

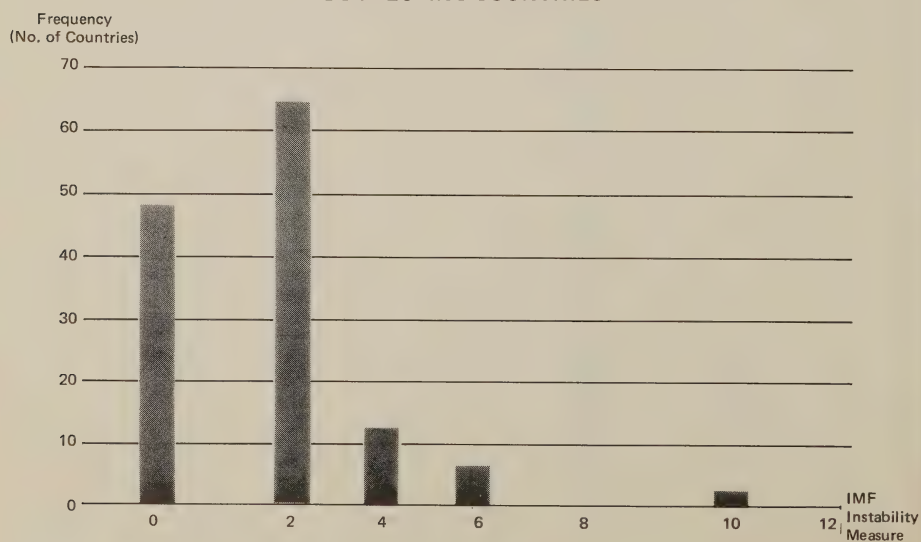
**NOMINAL EFFECTIVE EXCHANGE RATE INSTABILITY IN PERIOD 3:
DEVELOPING COUNTRIES**

Chart V
NOMINAL EFFECTIVE EXCHANGE RATE INSTABILITY IN PERIOD 1:
DEVELOPED COUNTRIES

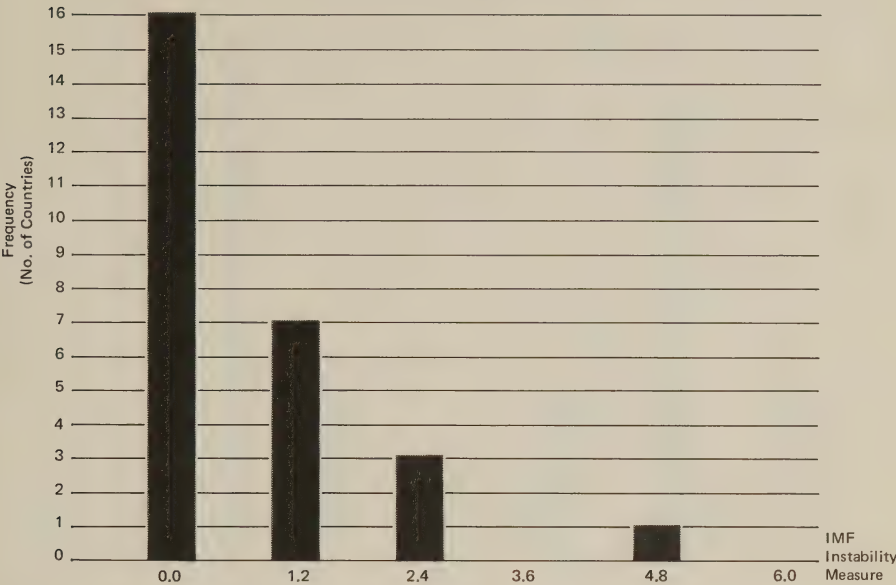


Chart VI
NOMINAL EFFECTIVE EXCHANGE RATE INSTABILITY IN PERIOD 3:
DEVELOPED COUNTRIES

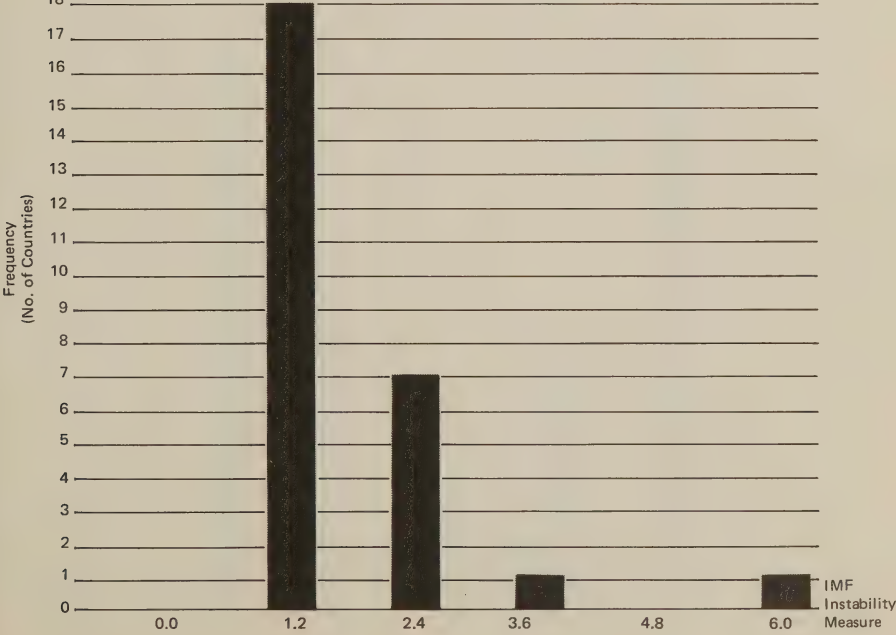


Chart VII
REAL EFFECTIVE EXCHANGE RATE INSTABILITY IN PERIOD 1:
ALL COUNTRIES

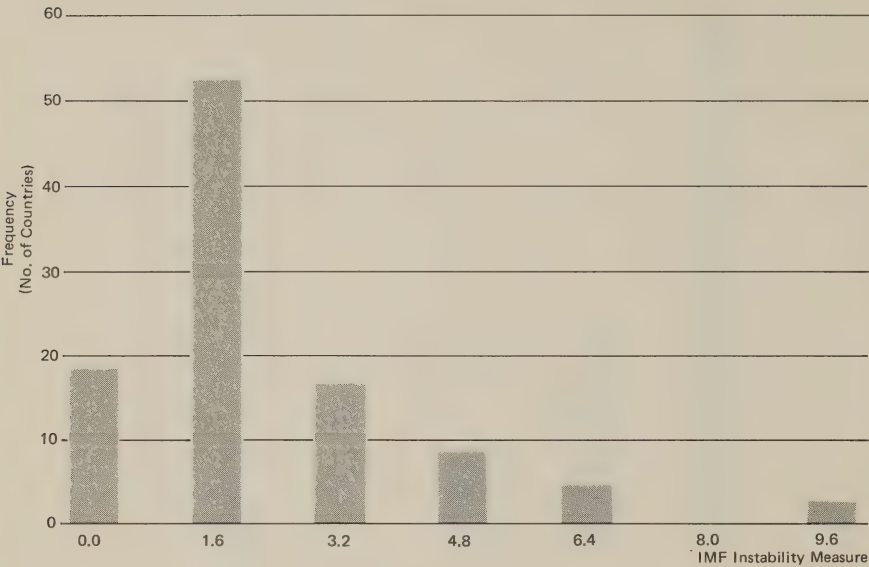


Chart VIII
REAL EFFECTIVE EXCHANGE RATE INSTABILITY IN PERIOD 3:
ALL COUNTRIES

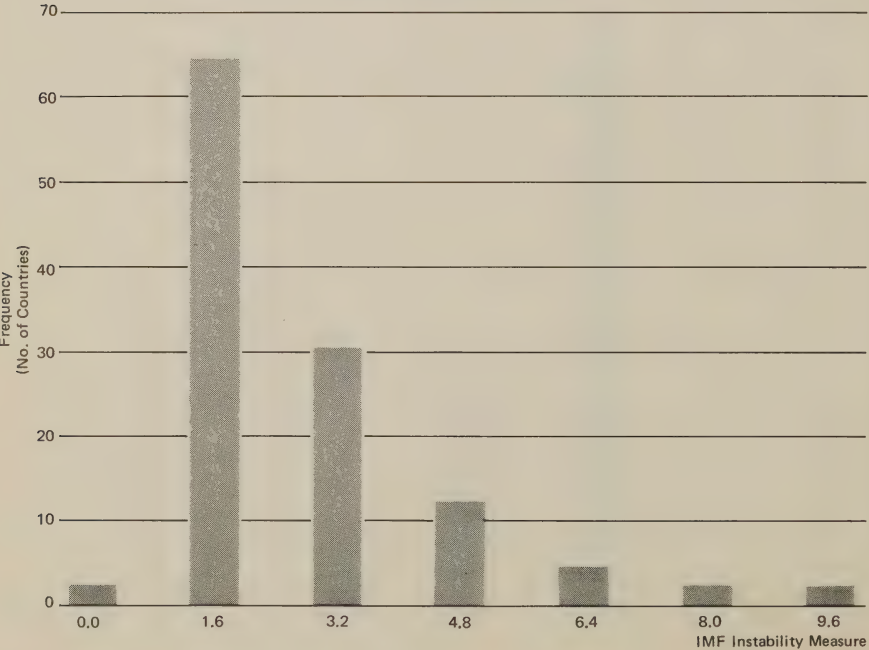


Chart IX
REAL EFFECTIVE EXCHANGE RATE INSTABILITY IN PERIOD 1:
DEVELOPING COUNTRIES

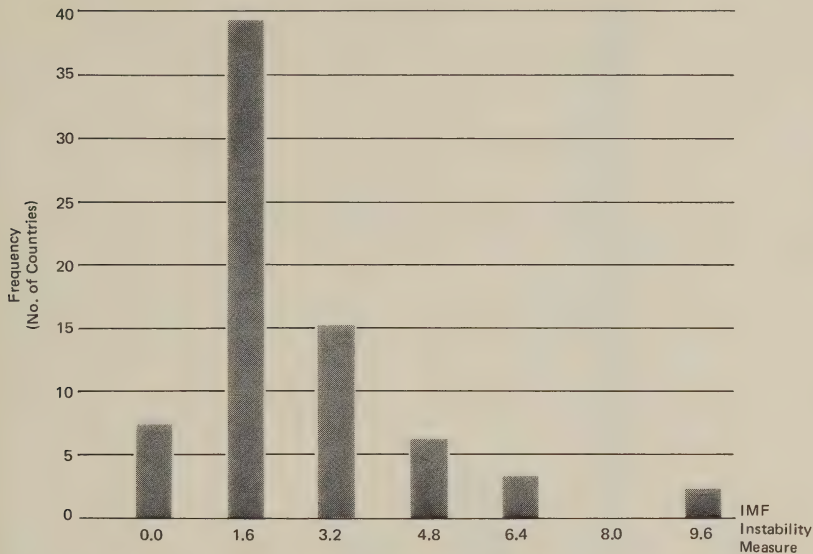


Chart X
REAL EFFECTIVE EXCHANGE RATE INSTABILITY IN PERIOD 3:
DEVELOPING COUNTRIES

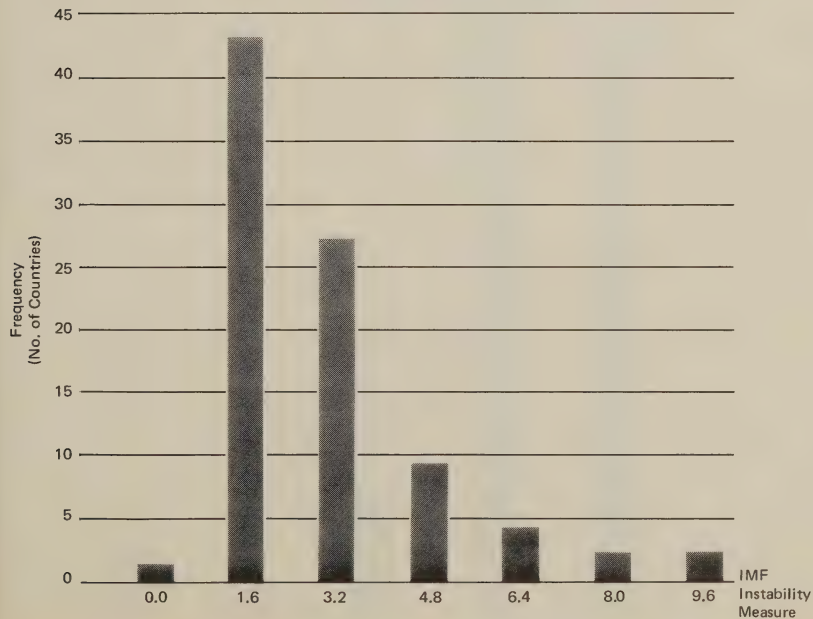


Chart XI

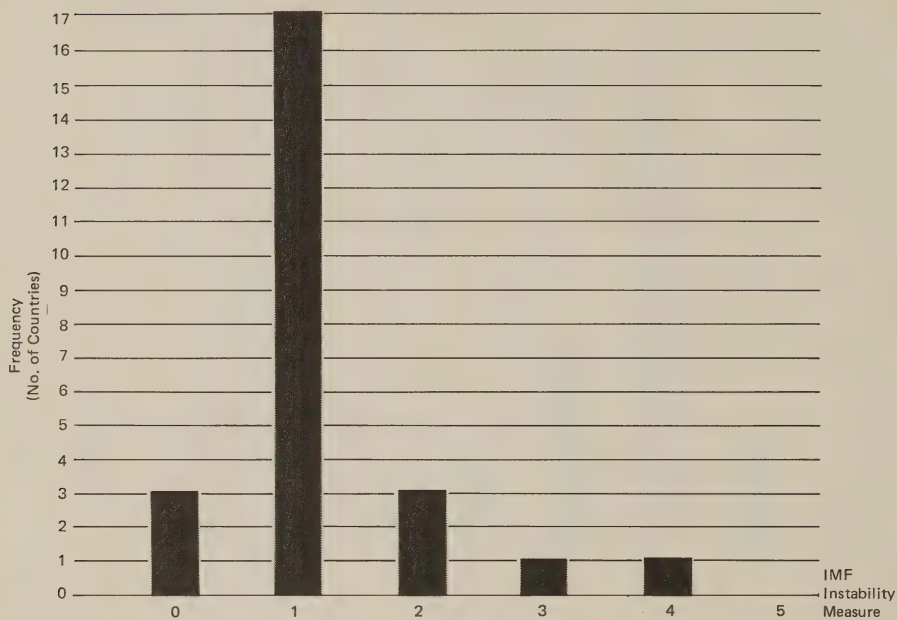
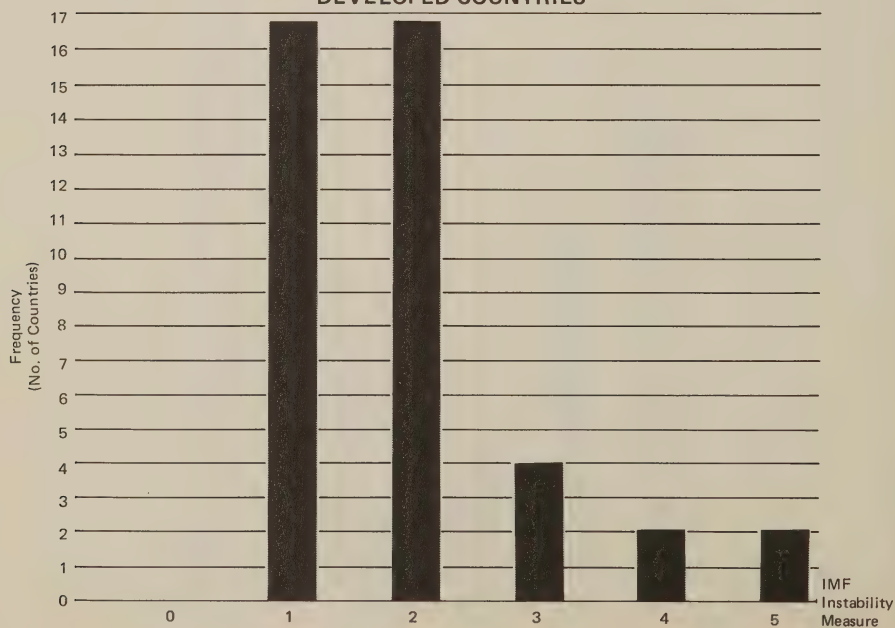
**REAL EFFECTIVE EXCHANGE RATE INSTABILITY IN PERIOD 1:
DEVELOPED COUNTRIES**

Chart XII

**REAL EFFECTIVE EXCHANGE RATE INSTABILITY IN PERIOD 3:
DEVELOPED COUNTRIES**

DETERMINATION OF QUOTAS AND THE RELATIVE POSITION OF
DEVELOPING COUNTRIES IN THE INTERNATIONAL MONETARY FUND

UNCTAD secretariat*

INTRODUCTION

The present note explains the possibilities that exist of improving the share of developing countries in IMF quotas using as a basis of analysis the Fund formulas. Section I discusses the multiple use of IMF quotas and gives a brief account of the history of quotas in the Fund. Section II summarizes the main results of an empirical study on the effects of improvements in the measurement of certain variables included in the formulas as well as of changes in the basic votes on the quotas and vote shares of developing countries. It includes also some discussion of the impact of changes in quota shares on the Fund's liquidity. Annex IV presents the results of regression analysis in explaining the present structure of Fund quotas.

The empirical analysis presented in the report concludes that improvements in the measurement of variables which enter the quota formulas, changes in the procedure for averaging different quota formulas and adjustment of the minimum quota policy for inflation could result in an increase in the quota share of developing countries from the present level of about 32 per cent to between 34 and 42 per cent, depending upon whether or not an incremental approach is taken to adjusting quota shares. If, in addition, basic votes are increased to restore their earlier share in total votes, the share of developing countries in total votes would be increased to between 44 and 50 per cent. Thus, the objective of increasing the quota share of developing countries (see the communique of the Group of Twenty-four on the occasion of the Helsinki meeting, 11 May 1982, paragraphs 9, 10 and 11) can be supported by a case largely developed within the present framework for determining quotas.

This is not, however, to argue that the present set of formulas provide an entirely suitable framework for determining quotas. Results based solely on the manipulation of the Fund formulas invariably lead to a reallocation of quota shares among developing countries. To remedy this, additional criteria are introduced, notably the objective set forward by the Group of Twenty-four and the Group of 77 in Belgrade (Outline for a Programme of Action on International Monetary Reform, Chapter IV, paragraph 8, 29 September 1979) and in the Helsinki Communique of the former Group (paragraph 10), i.e. that no individual developing country quota share should be reduced.

*July 1982.

SECTION I

OVERVIEW OF THE USE OF QUOTAS IN THE INTERNATIONAL MONETARY FUND

1. The concept of quotas and evaluation of their functions

The Bretton Woods Agreement established the concept of quotas as a major feature of the International Monetary Fund. The concept of an international monetary agency whose resources are derived from members' contributions, i.e. quotas, calculated more or less by formulas, was a radical departure from the original British idea drafted by Keynes' plan, and set forth in his "Proposal for an International Clearing Union". 1/ In Keynes' plan, the proposed agency was envisaged to have a "quantum of international currency" suited in amount to the needs and requirements of world trade and capable of deliberate expansion and contraction in order to maintain an appropriate level of world demand. 2/ In effect, the quotas gave the Fund the character of a reserve pool managed and controlled by the contributors in proportion to their shares, i.e. quotas. This arrangement severely limited the potential of the Fund to influence, let alone control, international liquidity and severed any direct relationship between international liquidity and global economic management.

A member's quota is determined in the light of a series of calculations and negotiations. Initially, quotas are calculated by certain formulas which contain some key economic variables denoting the importance of the country in the international economy. These calculations furnish the basis for negotiation of the actual quota of any particular member, with due regard to the overall limitations on the size of the Fund and the relative position of other members of similar standing.

The quotas serve four basic functions, namely, to determine (i) the distribution of voting power, (ii) contributions to Fund resources, (iii) access to resources, and (iv) shares in SDR allocations.

A country's total vote consists of 250 basic votes and one vote per SDR 100,000 of the quota. A higher share of basic votes in total votes should in principle favour small countries. For twenty-seven developing members, the basic votes account for at least 50 per cent of their total votes. At present, basic votes account for 13 per cent of the collective votes assigned to developing countries, compared with 5.5 per cent for the entire membership. However, since the late 1950s the share of basic votes in total votes steadily declined from 15.6 per cent in 1958 to 9.3 per cent in 1971 and 8.2 per cent in 1980.

The contribution of a member to the regular resources of the Fund is equal to its quota. Twenty-five per cent of the quota is paid for in reserve assets and the rest in the members' own currency. In increasing the resources of the Fund through quota increases or effecting a change in the relative quota distribution between developed and developing

countries, a reasonable balance between the prospective demand and supply of various currencies must be maintained to assure the liquidity of the Fund's General Account.

The access of a member to Fund resources is related to the quota of the member; the regular tranches of the Fund are equal to the quota of the member and drawings on the facilities are also related to the quota. Consequently, the total of members' quotas determines the aggregate size of potential claims on the regular resources of the Fund.

2. A brief history of quotas

Under the IMF Articles of Agreement (Article III), the Fund reviews the quotas at intervals not exceeding five years with a view to determining whether quotas should be increased to take into account changing economic conditions at the global and national levels. No increases in overall quotas were recommended after the first and second reviews (1950, 1956) since the Fund's resources were not heavily used in that period. In view of heavy drawings in the late 1950s, a special review in 1958/1959 recommended a 50 per cent increase in the overall resources of the Fund. Another 25 per cent increase was recommended and effected in 1965 under the fourth general review and a further 25 per cent in the wake of the fifth general review of 1970. In 1975, the sixth general review resulted in an overall increase in quotas of 32.5 per cent. In accordance with the decision of the Board of Governors on 11 December 1978, a 50 per cent increase in the overall quotas was recommended in connexion with the 1980 seventh general review. The acceptance of the seventh general review by all members, together with some selected quota increases raised total quotas to their current level of SDR 60,674 billion. Increases in the Fund's overall quotas took place also as a result of the growth of membership from 44 countries in June 1947 to 141 at present. Of the total number of members, those of developing countries accounts for 85 per cent.

Overall quota increases have not, however, kept pace with the growth of international trade. Total quotas declined from 10 per cent of world imports in 1950 to 9.7 in 1970 and 4 per cent in 1981. To the extent quotas are binding on drawing rights, this decline would imply a reduction in the availability of multilateral liquidity. However, through a number of new and extended facilities, the loss of liquidity has been partly offset. Nevertheless, IMF extended only \$ 5.3 billion in loans to non-oil developing countries in the period 1974-1979 against a total cumulative deficit in their current accounts amounting to over \$ 190 billion. This amounts to less than 3 per cent of the deficits and compares with a 70 per cent share provided by the international capital market.

Increases in quotas in favour of certain countries have taken place throughout the history of the Fund. There were such increases at the time of the third, fourth, fifth and sixth overall reviews. At the time of the fifth review, the quotas of 44 members were adjusted in relative

terms, with the largest increases going to developed countries such as Japan, France, and the Federal Republic of Germany. On the occasion of the sixth review in 1975, as may be expected, the quota shares of the oil-exporting developing countries were almost doubled. Article III of the Agreement provides that adjustment of the quotas of individual members may be considered at their request at any time if the Fund considers it appropriate. Subsequent to the seventh review, for example, the quota of Saudi Arabia was approximately doubled. Although the power to review and change quotas rests with the Board of Governors, it does not consider such reviews until it has received a report from the Executive Board. For an agreement to increase total quotas in the Fund, a majority of 85 per cent is required.

The Articles of Agreement do not detail a formula for calculating quotas. At the time of Bretton Woods, a formula containing five economic variables was used to calculate the initial quotas of the original members. 3/ In 1955, the Fund adopted the so-called "small quota policy" to assure countries of a minimum quota. 4/ From September 1958 to September 1965, some 35 countries were admitted under this policy and 32 other members were granted increases in their quotas as they qualified for application of the small quota policy. However, when very small countries applied for membership in the second half of the 1960s, the formula calculations were adjusted by the average ratio of trade to GNP of such countries in order to preserve a measure of equality in treatment among members.

SECTION II

SENSITIVITY OF QUOTA AND VOTING SHARES TO ALTERNATIVE FORMULA CALCULATIONS

1. Summary

The history of the use of quota calculations in IMF is a long and rather involved one. Over time three major trends may be noted. Firstly, quota formulas were used in a more or less systematic way to determine a range of quotas for the 97 countries which joined the Fund after 1947. This was particularly true with respect to the 74 countries which joined the Fund after 1960. Secondly, the variables which enter the formula calculations have been redefined over time. This has mainly taken the form of using balance-of-payments data on current account for total receipts and total payments of foreign exchange rather than exports and imports on a customs basis, and changing the manner in which variability of export earnings is calculated. Thirdly, a number of different formulas were introduced together with revisions of the weights in the original Bretton Woods formula. These different formulas fall into two classes: those which follow the Bretton Woods specification in using a multiplicative term - one plus the ratio of exports to GNP - and those which do not. Within each class, the formulas differ with respect to the relative weights assigned to the different variables entering the calculations. Some of these weighting schemes result in significantly greater quota shares for developing countries. 5/

Beginning with the fourth general review, several of these formulas were subjected to an averaging procedure to produce a single calculated quota which was compared with actual quotas to determine whether discrepancies were sufficiently large to warrant selective quota increases in the context of increases in total quotas. These exercises resulted in widespread selective increases at the time of the fifth and sixth general reviews, as was mentioned earlier.

In view of the outcome of negotiations which determined the shares of the original members of the Fund, as well as the use of different methods of calculating quotas over time and occasional selective quota increases, it is not surprising that calculated quotas continue to differ very substantially from actual (seventh review) quotas. 6/ It is by no means obvious on a priori grounds, however, how the quota shares of different groups would be affected by systematic application of any particular quota formula (or average of formulas), nor is it obvious how changes in the definition of variables entering these formulas would affect the group shares.

Accordingly, a number of exercises were carried out to explore the sensitivity of quota shares to changes in the definitions of variables, to the selection of formulas among the 16 formulas developed by the Fund, to the choice of weighting procedure to be used in determining a single calculated quota, and to adjusting the small quota policy to allow for inflation. Since voting shares depend on the allocation of basic votes as well as on quota shares, the sensitivity of voting shares to changes in the size of basic votes was also explored.

Since an adjustment in quota shares based on the recalculation of each quota would result in decreases in the absolute level of present quotas for some countries, any adjustment in quota shares which may be made in the course of the eighth review of quotas would most likely be made by means of variable percentage increases in countries' actual quotas. Nevertheless, the sensitivity analysis in this study has been undertaken by examining the effect that various formulas would have assuming that countries' quota were recalculated. This procedure was chosen for two reasons. In the first place, a revised procedure for calculating member quotas, if agreed upon in connexion with the current quota review, would probably be considered for use in subsequent quota reviews as well. If the distribution implied by consistent application of the agreed procedure were always applied to agreed increments to total Fund quotas, then over time the distribution of total quotas would approach the distribution of the incremental increases. Secondly, in the short run the incremental approach narrows the range of calculated quota shares of developing countries, thereby obscuring the longer term implications of the changes discussed in the note. Notwithstanding this preference on methodological grounds for analyzing the alternative distributions of total quotas, the discussion on voting shares is analyzed in terms of incremental adjustments to quotas in order to focus on the possible implications of the eighth review of quotas for short-run changes in the distribution of votes.

The various procedures used for calculating quotas invariably resulted in total Fund quotas ranging from 130 to nearly 400 per cent of actual (seventh review) quotas, thus providing a prima facie case for a major increase in the size of the Fund if it is meant to bear some reasonable relationship to the variables included in the formulas. For the purpose of this paper, the calculated quotas were derived by applying quota shares to levels of total quotas equal to 150 and 200 per cent of current quotas.

The principal conclusions of the analysis which is described more fully in the following pages are the following:

- (a) First, using the variables as defined by the Fund and using customs data, the calculated quota share of developing countries ranges from 25 to 31 per cent, with the Bretton Woods formula yielding the lowest share and the formula scheme V 7/ yielding the highest share; when balance-of-payments data are used, the range is increased slightly and is shifted upward.
- (b) Secondly, when variability of purchasing power of exports as measured using deviations from trend is calculated from regression equations rather than five-year moving average, the quota share of developing countries increases somewhat, depending upon the particular formula selected.
- (c) Thirdly, correcting the procedure for adjusting the quotas of those countries to which the small quota policy applies in order to take into account world inflation from 1959 to 1979 would increase the calculated share of developing countries slightly.
- (d) Fourthly, the procedures normally used by the Fund in aiming at a single calculated quota give the Bretton Woods formula an equal weight with the formulas more favourable to developing countries. Leaving the Bretton Woods formula aside and taking an average of the two formulas most favourable to developing countries would increase the share of developing countries by about 3 percentage points.
- (e) Fifthly, combining the changes described under the above points would result in a calculated quota share for developing countries of 36 per cent compared with the present 32 per cent.
- (f) Sixthly, increasing the number of basic votes to restore their importance vis-à-vis quotas to what had been agreed upon when the Fund was first established would increase the share of developing countries in total votes by an additional 10 percentage points.
- (g) Finally, all of these changes taken together would result in a vote share for developing countries of 46 per cent based on a reallocation of total quotas. However, applying these procedures with the restriction that no single developing country's quota share be less than its present one results in a calculated share in total votes for developing countries of 50 per cent.

2. Choice of variables in the quota formulas

The variables which enter the several formulas include the following: gross national income, reserves, exports, imports, and the variability of export earnings. 8/ Where the latter three variables are measured on the basis of customs data - exports f.o.b. and imports c.i.f. - the data are customarily referred to as "set A" data. Alternatively, total foreign-exchange receipts including private transfers on a balance-of-payments basis may be substituted for exports and total payments may be substituted for imports. In this case, one refers to "set B" data. It has been the practice of the Fund to calculate quotas on the basis of both sets of data and to average the results for any given formula.

When exports and imports enter the formulas alone or as a ratio with respect to gross national income, an average of the five most recent years is used, in this case 1975-1979. During a period of rapid inflation, this procedure would reduce the importance of this variable relative to gross national income since the implicit "average price" is centred on 1977. One way of correcting for this effect is to deflate trade data by the world price index, compute the five-year average and then reflate by the percentage change in prices from 1977 to 1979.

Variability of export earnings is usually calculated by using a measure analogous to a standard deviation, where the mean is a five-year moving average computed over a thirteen-year period. 9/ An alternative procedure which has been suggested in UNCTAD studies on compensatory financing would be to make similar calculations where the mean is the value predicted by an equation fitted to trend.

Another change in the calculation of export variability would be to substitute the purchasing power of exports for the value of exports. This is equivalent to multiplying export volumes by the terms of trade indexed to 1.0 in 1979, which would more adequately reflect variations in a country's import capacity. Variability in the purchasing power of exports can of course be computed by measures based on deviations from trend or by measures based on deviations from moving averages.

These different methods of defining variables may be combined with one another in various ways to produce 16 data sets for use with any of the 16 quota formulas 10/ developed by the Fund. Table 1 shows quota shares for developing countries for about one-fourth of the 512 different combinations examined. Among the results not presented in this table were those where trade values were not adjusted for inflation. While this correction has the effect of increasing the total size of calculated quotas, group shares are not significantly changed.

Sensitivity in quota shares was found to be associated mainly with changes in the method of measuring the variability of export earnings.

Table 1

Sensitivity of developing country quota shares to changes
in variable definitions and choice of formula

	Custom basis				Balance-of-payments basis			
	Variability of export value		Variability of purchas- ing power of exports		Variability of export value		Variability of purchas- ing power of exports	
For- mula	Moving average method (1)	Trend method (2)	Moving average method (3)	Trend method (4)	Moving average method (5)	Trend method (6)	Moving average method (7)	Trend method (8)
B.W.	24.7	26.7	25.8	27.2	26.6	28.6	27.2	28.9
I	24.6	27.4	26.2	28.2	26.0	29.0	26.9	29.3
II	24.9	27.4	26.3	27.9	27.1	29.6	27.8	29.7
III	26.3	30.0	28.4	30.4	28.6	32.3	29.6	31.8
IV	30.6	36.4	33.9	36.2	32.5	38.1	33.8	36.4
V	30.9	36.7	34.3	36.3	32.9	38.4	34.2	36.5
VI	28.4	33.0	31.1	32.8	30.9	35.1	31.9	34.0
M1	25.7	29.2	28.0	29.2	26.5	29.9	27.5	29.0
M2	25.0	27.7	26.7	27.7	25.8	28.5	26.7	27.8
M3	26.8	30.7	29.4	30.6	27.4	31.4	28.6	30.1
M4	28.5	33.2	31.6	32.8	20.9	33.6	30.3	31.8
M5	27.3	31.3	29.9	30.9	27.9	31.8	29.0	30.4
M6	28.2	32.6	31.1	32.2	28.7	33.1	29.9	31.4
M7	30.1	35.6	33.7	34.9	30.6	35.9	31.9	33.5
M8	28.0	32.4	30.9	32.0	28.6	32.8	29.8	31.2
M9	30.0	35.3	33.5	34.6	30.4	35.6	31.8	33.3

The use of balance-of-payments data rather than customs data was found to be significant as well. Not surprisingly, the sensitivity of quota shares to these changes was found to be greatest in those formulas which assign relatively high weights to variability of export earnings. 11/

The substitution of purchasing power of exports for export values in the measure of variability of export earnings is significant when customs data are used and where the method of moving averages is used to predict trend values. This may be seen by comparing columns (1) and (3) in table 1, where the quota share increases in the range of 1.1 to 3.6 percentage points.

Using the method of linear regression to predict trend values

rather than a five-year moving average in the measure of variability of export earnings is even more important than substituting purchasing power of exports for export values. This may be seen by comparing any of the four pairs of columns. Comparing, for example, column (5) with column (6), the quota share of developing countries increases in the range of 2.0 to 5.5 percentage points.

Taken separately each of these corrections appears to have similar consequences because each reflects more adequately the effects of inflation than do the measures currently in use. In discussing the formula used in connexion with the compensatory financing facility, the UNCTAD secretariat has argued elsewhere for replacement of the five-year moving average calculation of trend by that predicted by the log-linear regression equation, as well as the incorporation of the terms of trade in such formulas. ^{12/} When the two changes are using customs data the combined effect is larger than either taken separately as may be seen by comparing columns (1) and (4) with columns (2) and (3). In this case the quota share of developing countries increases in the range of 2.4 to 5.6 percentage points. This was not, however, found to be the case when balance-of-payments data was used.

The effect of improving the measurement of the variability of export earnings is further enhanced when balance-of-payments data rather than customs data are used in the formulas. This may be seen by comparing columns (2) and (6), where the quota share of developing countries increases by as much as 2.3 percentage points in the case of the multiplicative formulas.

The combined effect of taking all suggested changes together may be seen by comparing columns (1) and (8). In this case the quota share of developing countries increases in the range of 2.8 to 5.8 percentage points reaching 36.5 per cent in the case of formula V.

3. Choice of formulas and the averaging procedure

As may be seen in table 1 quota shares are extremely sensitive to the choice of the formula. In column 1 which shows the results of 16 quota formulas with variables as conventionally measured and on a customs basis, the share of developing countries ranges from 24.6 to 30.9 per cent. When the variables are measured differently the range is increased to an interval of 28.5 to 38.4 per cent, that is, from 6.3 to 9.9 percentage points.

Because of this variability, the Fund has in the past used various averaging procedures to arrive at a single calculated quota. First, each formula is applied both to customs data and balance-of-payments data and the result is then averaged. Secondly, the result for the Bretton Woods (B.W.) formula, revised and reduced, is compared with the average of the lowest two of four formulas which are relatively favourable to developing countries and the greater of these two

calculated quotas is chosen. Table 2 illustrates the results of this procedure compared with other procedures which result in substantially higher quota shares for developing countries.

Table 2

Sensitivity of developing country quota shares
to different averaging procedures

		(1)	(2)	(3)	(4)	(5)	(6)
With present "small quota policy"	Average of customs and balance-of- payments data	32.4	25.7	28.5	32.0	35.0	35.4
	Balance-of- payments data alone	32.4	25.7	28.5	32.2	34.8	35.4
With present "small quota policy"	Average of customs and balance-of- payments data	32.4	26.4	29.2	32.5	35.4	35.8
	Balance-of- payments data alone	32.4	26.4	29.2	32.5	35.3	35.9

- Notes: (1) Actual.
 (2) Bretton Woods.
 (3) B.W. or average of lowest two of four schemes (Schemes III, IV, M4 and M7).
 (4) B.W. or average of lowest two of the four schemes with variable changes.
 (5) Average of two highest of four schemes with variable changes.
 (6) Average of two of highest of 16 schemes with variable changes.

The first conclusion which may be drawn is that the use of the Bretton Woods (B.W.) formula in the procedure for arriving at a single calculated quota (column 4) maintains the calculated quota share of developing countries at roughly current levels even with the incorporation of changes in variable definitions discussed above.

Secondly, choosing the highest of the two formulas among the four currently used by the Fund in their averaging procedure results in an increase in the quota share of developing countries by about 3 percentage points. This result may be slightly improved by choosing the highest of any two of the sixteen quota formulas.

Finally, averaging the results based on balance-of-payments data with those based on customs data does not appear to have a significant impact.

4. Relevance of the small quota policy

The small quota policy was already mentioned in section I. When this policy was implemented in 1959, the following procedure was adopted: quotas less than SDR 5 million could be increased to SDR 7.5 million; quotas equal to or greater than SDR 5 million but less than 15 million could be increased to SDR 15 million; and quotas equal to or greater than SDR 15 but less than SDR 20 million could be increased to SDR 20 million. Between 1959 and 1980, however, the generalized increases of the 4th, 5th, 6th and 7th general reviews would have led to a cumulative increase in total quotas of more than 211 per cent, not allowing for increases in membership or selective quota increases. These increases are of roughly the same order of magnitude as inflation in world export prices denominated in SDRs. An appropriate adjustment in the application of this policy might take the form of tripling the amounts which bracket the intervals referred to above and creating a new lower interval for the very small countries which have joined the Fund since the formulation of the small quota policy.

Accordingly, the following procedure was introduced in the calculations prepared for this report: quotas less than SDR 5 million were increased to SDR 7.5 million; quotas equal to or greater than SDR 5 million but less than SDR 15 million were increased to SDR 15 million; quotas equal to or greater than SDR 15 million but less than SDR 45 million were increased to SDR 45 million; and quotas equal to or greater than SDR 45 million but less than SDR 60 million were increased to SDR 60 million.

This procedure resulted in further increases in the quotas for between 42 and 62 countries, depending upon whether or not the total size of the Fund was assumed to increase by 50 or 100 per cent and whether the calculation was performed with respect to total quotas or on an incremental basis. Table 2 shows the impact on shares of developing countries in total quotas which the introduction of this procedure has had for the case where total quotas are increased by 100 per cent. The quota share of developing countries is systematically increased by 0.4 to 0.7 percentage points, depending on the particular averaging procedure chosen.

A change in the averaging procedure to exclude the obligatory use

of the Bretton Woods formula, combined with the changes in variable definitions discussed in this report, could thus result in an increase in the calculated quota share of developing countries to nearly 36 per cent. 13/

5. Voting shares and basic votes

As noted earlier, total votes of Fund members are allocated according to the formula: 250 basic votes plus one additional vote for each 100,000 SDRs of a member's quota. This procedure was adopted to strike a balance between voting based on equality among sovereign nations and voting proportional to relative economic importance. This balance has, however, been steadily eroded since general increases in quotas have multiplied each country's quota by about 4.65 times from the first to the seventh general reviews, while basic votes have not been altered. Restoring the relative importance of basic votes to that which they held when the Articles of Agreement were originally adopted would have the effect of increasing the share of developing countries by more than 8 to 10 percentage points.

As may be seen in table 3, leaving basic votes unchanged at their present level while increasing quotas by incorporating the changes discussed previously would result in a vote share for developing countries of 37 per cent. Increasing basic votes to 2300 without incorporating any of the changes suggested with respect to calculations of quotas would result in a vote share for developing countries of 40 per cent. The most favourable position would, of course, be achieved by incorporating the suggested changes in quota calculations while at the same time increasing basic votes appropriately. In this case, the voting share of developing countries would reach 46 per cent.

Table 3

Voting share of developing countries with 100 per cent
increase in the size of the Fund

Number of basic votes	Actual	Bretton Woods or average of two lowest alternative formulas	Average of two highest formulas with variable changes
250	35.1	30.6	37.2
2300	-	40.3	45.6

The analysis discussed so far is based on the application of quota formulas to country-specific macroeconomic data. Not too surprisingly, this procedure has resulted - even for an increase in total quotas of 100 per cent - in calculated decreases in the present level of quotas of about 20 countries. Except in the case of the United States of America and China, all of them are developing countries that are large enough not to be embraced by the small quota policy which was programmed into this exercise.

Accordingly, two additional exercises were undertaken which applied the allocation of quotas as determined by the formulas in an incremental manner. ^{14/} In the first such exercise, the formulas were used to allocate the assumed increase in total Fund quotas. While this procedure would assure that no country would suffer a diminution of its present quota, its quota share could fall. In the second exercise, the formulas were applied to the total quotas with the restriction that the present shares of developing countries and China not be allowed to fall. ^{15/} Those countries whose shares were increased as a result retained the higher shares in the first round of calculation. Developing countries whose shares were reduced then had their original shares restored at the expense of all other countries. The implication for quota shares and vote shares of the two variants of the incremental approach are compared with adjustments in total quotas in table 4. With respect to the distribution of quota shares, the incremental approach applied to levels would increase developing country shares to nearly 34 per cent compared with their present share of 32 per cent. Adjustments of total quotas would increase their share by somewhat more - to 36 per cent. The greatest increase would, however, result from applying the incremental approach to quota shares in which case the share of developing countries in total Fund quotas would reach 42 per cent. As is to be expected, the pattern of voting shares is similar to that of quota shares under the three alternatives shown. However, increasing the basic votes in this case would result in a vote share for developing countries of 50 per cent. Annex table A.V.1 sets out the present and hypothetical voting shares of IMF members on the assumption of a 100 per cent increase in quotas, with the restriction that the present shares of developing countries and China not be allowed to fall, arranged in terms of constituencies.

Table 4

Incremental versus total quota adjustments
and the vote share of developing countries a/

	50 per cent increase			100 per cent increase		
	Quota share	Vote share		Quota share	Vote share	
		250 Basic votes	1750 Basic votes		250 Basic votes	2300 Basic votes
Adjustment applied to total quotas	36.1	37.8	45.9	35.9	37.2	45.6
Adjustment applied to increments in quotas	33.8	35.6	44.1	34.2	35.5	44.2
Adjustment applied to increments in quota shares	42.0	43.5	50.5	42.0	43.1	50.4

a/ For the case where the two highest formulas are used together with all suggested changes in variable definitions.

FOOTNOTES

1. J.M. Keynes, Proposal for an International Clearing Union, CMD 6437, London, H.M. Stationery Office, 1943.
2. Arrangements whereby an international monetary authority might exercise the role of increasing or reducing international liquidity to reduce unwanted fluctuations in autonomous financial flows generated by the operation of the world economy will be the subject of a separate study.
3. The original Bretton Woods formula was 2 per cent of national income in 1940 plus 5 per cent of holdings of gold and US dollars as of 1 July 1943, plus 10 per cent of average imports during the period 1934-1938 plus 10 per cent of the difference between the largest and smallest export values during the same period, all of which was multiplied by 1 plus the ratio to GNP of average exports during the same period.
4. Small countries were those whose quota was less than SDR 25 million, i.e. less than their basic votes equivalence.
5. See Annex II for a list of these formulas, of which four are in current use.
6. Statistical analysis by means of linear regression - details of which are reported in Annex IV - is consistent with the inference one could make from the historical narrative, namely, that the relative importance of the different variables entering the formulas in explaining relative quotas differs according to the dates of entry of members.
7. These formulas may be found in Annex II.
8. See Annex I for a complete listing.
9. See Annex II for the actual formula.
10. Idem.
11. These are the multiplicative formulas, IV, V, and VI, and the linear formulas M4, M5, M6, M7, M8, and M9.
12. See UNCTAD secretariat, "Compensatory financing for export fluctuation" (TD/B/C.3/152/Rev.1), 9 April 1979.
13. A mathematical derivation presented in Annex III demonstrates why the changes suggested in this note have the observed effects on the quota share of developing countries. Algebraic manipulation yields the following conclusions which are strictly true in the case of the linear formulas and approximately true in the case of the multiplicative formulas:
 - (1) the share of a group of countries in total quotas is a weighted average of the group share in the total aggregate value of each variable;

- (2) the weight of any particular variable depends not only on the coefficients in the formulas themselves but also on the aggregate value of that variable relative to the aggregate values of other variables entering the formulas.

Since it is only in the case of variability of exports and total reserves that the share of developing countries exceed their share in total quotas, this share is increased (a) the larger is the relative size of the coefficient associated with this variable in the formula chosen; (b) the larger is the relative size of the aggregate value of this variable compared to other variables in the formula; and (c) the larger is the share of developing countries in alternative measures of this variable.

14. The concept of an incremental approach employed in this report differs from the term encountered in a number of IMF staff papers, where it means the application of the formulas to incremental changes in the magnitudes of the relevant variables during the period between quota reviews.
15. See Chapter IV, paragraph 8, of "Outline for a Programme of Action on International Monetary Reform", Intergovernmental Group of Twenty-four on International Monetary Affairs and Group of Seventy-seven. Belgrade, Yugoslavia, 29 September 1979 and paragraph 10 of the Helsinki Communiqué of the Group of Twenty-four, 11 May, 1982.

ANNEX I

VARIABLES USED IN QUOTA CALCULATIONS
(In millions of SDRs)^{1/}

1. National income - 1979.
2. Reserves - end 1979.
3. Exports - 1975 to 1979 average.
4. Imports - 1975 to 1979 average.
5. Exports adjusted for inflation - 1975 to 1979 average.
6. Imports adjusted for inflation - 1975 to 1979 average.
7. Current receipts - 1975 to 1979 average.
8. Current payments - 1975 to 1979 average.
9. Current receipts adjusted for inflation - 1975 to 1979 average.
10. Current payments adjusted for inflation - 1975 to 1979 average.
11. Variability of exports: deviation from moving average - 1967 to 1979 average.
12. Variability of exports: deviation from trend - 1967 to 1979.
13. Variability of current receipts: deviation from moving average - 1967 to 1979.
14. Variability of current receipts: deviation from trend - 1967 to 1979.
15. Variability of purchasing power of exports: deviation from moving average - 1967 to 1979.
16. Variability of purchasing power of exports: deviation from trend - 1967 to 1979.
17. Variability of purchasing power of receipts: deviation from moving average - 1967 to 1979.
18. Variability of purchasing power of receipts: deviation from trend - 1967 to 1979.

^{1/} Data were taken from the IMF, International Financial Statistics, and Balance of Payments Yearbook supplemented by UNCTAD secretariat estimates where data series were missing or incomplete.

ANNEX II

IMF FORMULAS

Bretton Woods, revised, reduced	(.010Y+.025R+.050M+.2276V)	(1+X/Y)
Scheme I	(.0130Y+.013R+.026M+.3146V)	(1+X/Y)
II	(.0085Y+.013R+.065M+.3043V)	(1+X/Y)
III	(.0065Y+.078M+.5065V)	(1+X/Y)
IV	(.0045Y+.07M+.9622V)	(1+X/Y)
V	(.0025Y+.085M+1.00V)	(1+X/Y)
VI	(.002Y+.105M+.7141V)	(1+X/Y)
M1	.0078Y+.042M+.042X+.655V	
M2	.0065Y+.052M+.052X+.512V	
M3	.0065Y+.044M+.044X+.797V	
M4	.0050Y+.044M+.044X+1.044V	
M5	.0045Y+.052M+.052X+.84V	
M6	.0045Y+.048M+.048X+.983V	
M7	.0045Y+.039M+.039X+1.304V	
M8	.004Y+.051M+.051X+.958V	
M9	.0047Y+.042M+.042X+1.279V	

Where Y is gross national income, R is total reserves, M is a five-year average of imports, X is a five-year average of exports, and V is a measure of the variability of exports earnings to the formula given below. X, M, and V may be calculated with customs data: exports f.o.b. and imports c.i.f., or with balance-of-payments data: total credits for goods, services, and private transfers replace exports and total debits for goods, services and private transfers replace imports.

$$V = \frac{(X(i) - \bar{X}(i))^2}{9}$$

Where X(i) are the predicted values given by a five-year moving average and X(i) are the observed values. In one variant used in this exercise the X(i) are the values predicted by the regression equation $\log X = a(1) + a(2) \text{ time}$.

ANNEX III

MATHEMATICAL DERIVATION OF GROUP SHARES IN TOTAL QUOTAS

Let $Q(i, LDC)$ be the sum of quotas of developing countries (LDC) members of the Fund calculated with the formula i:

$$Q(i, LDC) = \sum_{k \in LDC} (a(i, 1)Y(k) + a(i, 2)R(k) + a(i, 3)M(k) + a(i, 4)X(k) + a(i, 5)V(k))$$

with 2/

$$a(i, j) = a'(i, j) (1 + (j) \overline{X} / \overline{Y})$$

where 3/

$$i = 1, 16, j = 1, 5$$

and

$$\overline{X} = X(k)/N, \quad \overline{Y} = Y(k)/N$$

$a'(i, j)$ are the five possible different weights used in the sixteen formulas used to derive calculated quotas by the Fund.

If the formula used is of the multiplicative form (Bretton Woods) then:

$$a'(i, 4) = 0 \text{ if } i = 1, 3 \text{ or } i = 4, 9 \text{ if } i = 4, 9$$

with

$$(j) = 1, j = 1, 5$$

If the formula used is of the linear form, then:

$$a'(i, 2) = 0 \text{ if } i = 8, 16$$

and

$$(j) = 0, j = 1, 5$$

2/ The adjustment factors $(1 + (j)X/Y)$, should be $(1 + (j)X(k)/Y(k))$. But in order to simplify the calculations it has been assumed that $X(k)/Y(k)$ is equal to the regional average: X/Y .

3/ $x = 1, n$ stands for $x = 1, 2, \dots, n$.

Using the same notation, the size of the Fund is:

$$Q(i, SF) = \sum_{k \in U} (a(i, 1)Y(k) + a(i, 2)R(k) + a(i, 3)M(k) + a(i, 4)X(k) + a(i, 5)V(k))$$

where U is the set of countries members of the Fund.

Taking

$$Y(LDC) = \sum_{i \in LDC} Y(i), \quad Y(U) = \sum_{i \in U} Y(i)$$

Writing

$$b(i, 1) = a(i, 1)Y(U)/Q(i, SF)$$

and similarly for the other variables, we have:

$$Q(i, LDC)/Q(i, SF) = b(i, 1)(Y(LDC)/Y(U) + b(i, 2)(R(LDC)/R(U)) \\ + b(i, 3)(M(LDC)/M(U) + b(i, 4)(X(LDC)/X(U)) \\ + b(i, 5)(V(LDC)/V(U))$$

where obviously:

$$\sum_j b(i, j) = 1$$

So the size of $Q(i, LDC)/Q(i, SF)$ depends upon the LDC share in the total sum of each of the variables, the relative size of the coefficients in each formula, and the aggregate value of each variable compared to the size of total quotas.

The attached table A.III.1 illustrates - for only two of sixteen data sets examined in this note - the variability of the effective weight of each variable with respect to the formula selected and with respect to the definition of the variable chosen. Since developing countries' share in members' total for variability of earnings is higher than their average in total quotas, the formulas which assign a high effective weight to this variable, i.e. IV, V, M7, M9 are those which produce larger quota shares for developing countries. As may also be seen from the table, the effective weight is higher using the balance-of-payments data and measuring variability by means of the linear regression method than when customs data is used together with the moving average method.

TABLE A.III.1

EFFECTIVE WEIGHTS FOR QUOTA FORMULA VARIABLES EXPRESSED
AS DEVELOPING COUNTRY SHARES IN MEMBER TOTALS
(Percentages)

Formulas	Data set A				
	National income	Reserves	Imports c.i.f.	Exports f.o.b.	Variability of exports (moving average)
B.W.	48.8	5.7	35.9	...	9.6
I	64.6	3.1	19.0	...	13.4
II	39.9	2.8	44.9	...	12.3
III	29.1	...	51.4	...	19.5
IV	19.5	...	44.6	...	35.9
V	10.6	...	53.0	...	36.4
VI	8.5	...	65.5	...	26.0
M1	30.4	...	24.1	23.6	21.9
M2	24.9	...	29.4	28.8	16.9
M3	24.8	...	24.7	24.2	26.2
M4	18.7	...	24.2	23.7	33.5
M5	16.7	...	28.5	27.9	26.9
M6	16.7	...	26.2	25.7	31.4
M7	16.6	...	21.2	20.8	41.4
M8	14.8	...	27.7	27.1	30.4
M9	14.7	...	22.7	22.2	40.4
<u>Memo item:</u> Developing countries' share in member totals	18.6	42.8	20.8	24.6	42.3

TABLE A.III.1 (cont'd)

EFFECTIVE WEIGHTS FOR QUOTA FORMULA VARIABLES EXPRESSED
AS DEVELOPING COUNTRY SHARES IN MEMBER TOTALS
(Percentages)

Formulas	Data set B				
	National income	Reserves	Current payments adjusted for inflation	Current receipts adjusted for inflation	Variability of receipts (trends)
B.W.	36.7	4.3	42.5	...	16.5
I	50.3	2.3	23.3	...	24.1
II	28.2	2.0	49.9	...	19.9
III	18.8	...	52.2	...	28.9
IV	11.3	...	40.8	...	47.9
V	6.0	...	46.9	...	47.1
VI	4.9	...	60.1	...	34.9
M1	19.4	...	24.2	24.2	32.2
M2	16.0	...	29.6	29.6	24.8
M3	15.2	...	23.9	24.0	36.9
M4	10.9	...	22.1	22.2	44.8
M5	10.0	...	26.6	26.7	36.7
M6	9.7	...	24.1	24.1	42.1
M7	9.3	...	18.7	18.7	53.3
M8	8.6	...	25.4	25.4	40.6
M9	8.2	...	20.0	20.0	51.8
<u>Memo item:</u> Developing countries' share in member totals	18.6	42.8	24.0	24.2	42.7

ANNEX IV

STATISTICAL TESTS OF VARIABLES IN THE IMF FORMULAS

The ability of the variables of the Fund formulas to explain present quotas was tested in a cross-section regression analysis using both multiplicative and linear specifications. Tests were run for total Fund members, founding members of the Fund, founding members of the Fund other than the United States of America, the United Kingdom, France, and China, and members that joined the Fund after 1950. The principal findings were the following.

The measure of goodness-of-fit (R-square) is quite high for the total Fund membership (94). ^{4/} It is higher, however, for the founding members (98) than for other members (95). However, when the 4 principal countries mentioned above are excluded, the R-square drops to 84 for the remaining founding members. These results may be seen in table A.IV.1 by comparing equation (1), (6), (11) and (16) which fit the multiplicative version to customs data.

For the total Fund membership, the most significant variable by far is national income; imports are barely significant when trade data are used in the multiplicative formulation, but are not significant when the balance-of-payments data are used; neither reserves nor the variability of export earnings was found to be significant.

A similar picture emerges for the founding members of the Fund since national income is most often the only significant variable, although imports emerge as barely significant in the linear formulation when balance-of-payments data are used. However, when the 4 countries mentioned above are excluded, variability of export earnings emerges as significant at the 90 per cent level in both the multiplicative and linear specifications.

A quite different picture emerges for the countries which joined the Fund after the initial signatory members. Where customs data are used in the multiplicative formulas, all variables are significant, nearly always at the 95 per cent level of significance. When reserves are eliminated from the formula, moreover, the coefficient attached to income falls slightly, while that of imports and variability increase substantially (see equation (6)). When balance-of-payments data are used in the multiplicative formula, however, variability ceases to be significant. In the linear specification, all variables are significant regardless of the data set chosen.

^{4/} Expressed as a percentage.

Owing to the failure of total quotas to increase in line with trade volumes and prices over the past 20 years, the coefficients of the formula do not at first glance resemble those of any of the formulas. Accordingly, the coefficients were magnified by the factors approximating (1) the multiple of existing quotas which would be given by applying the Bretton Woods formula and (2) the multiple which would be given by formula VI. T-values and the coefficient of determination are not shown since these are not changed significantly by such a transformation. Comparing equations (7) and (8) for later members with (12) and (13) for founding members suggests that the weighting pattern of the Bretton Woods formula more closely approximate the regression weights in the case of the founding members, but that those formulas which attach significantly less weight to national income and more weight to other variables more closely approximate the distribution of quotas among other members.

Because of the high correlation which exists between national income and other variables, the relative sizes of the coefficients are not certain even where the t-values appear to be satisfactory. Consequently, tests were made to see how successful other variables were in explaining the residual variation when the effect of national income was removed. This was done by fixing high and low coefficients for national income using the values of the Bretton Woods formula and scheme VI, since these are the extremes found in the Fund formulas.

For original members, imports now appear to be significant in explaining 84 per cent of the residual variance when the coefficient for national income is fixed at 0.01. For later members, however, both imports and variability of exports are highly significant and together explain 92 per cent of the residual variance when the coefficient for national income is fixed at .002. When this coefficient is fixed at 0.01 only 27 per cent of the residual variance is explained.

It would thus appear that the distribution of quotas among these later members, which now constitute a majority in the Fund, is best explained by a formula which assigns a relatively low weight to national income, a relatively large weight to imports and a very much larger weight to variability of exports.

These findings are broadly consistent with the standard historical narrative concerning the evolution of quotas in the IMF. The weights of the original Bretton Woods formula were chosen in order to rationalize the relatively large quotas agreed upon for the United States of America, the United Kingdom and France. The quotas of other founding members departed significantly from the quotas indicated by the formula. New members, however, increasingly agreed to quotas within a range established by application of the formulas. Moreover, this was increasingly true since 1960.

While the unequal treatment has its historical origins, there does not appear to be any reason to continue this practice. This was

recognized in connexion with the fifth review of quotas, when application of the formulas was used to determine a pattern for distribution which was subsequently applied to a \$ 10 billion increase in the total quotas of the Fund. This procedure could well have been employed for the sixth and seventh review exercises, but instead the procedure adopted was that of proportional increases combined with selective increases.

TABLE A.IV.1

REGRESSION ANALYSIS OF VARIABLES IN THE FUND FORMULAS

Dependent variable quota (Q)	Independent variable	National income (Y)	Imports c.i.f. (M)	Variability of exports (V)	Constant	R ² (per cent)
<u>Total members</u>						
(1) $Q/(1+X/Y)$		.0066 (16.50)	.0063 (1.31)	-.0881 (-1.39)	85.80 (3.10)	94
(2) $Q \times A/(1+X/Y)$		.0163	.0155	-.2176	212.00	
(3) $Q \times B/(1+X/Y)$		.0206	.0196	-.2749	267.80	
(4) $Q \times A/(1+X/Y) - .01Y$	0791 (9.20)	-.4494 (-2.55)	160.50 (2.08)	62
(5) $Q \times B/(1+X/Y) - .002Y$	1557 (12.46)	-.6535 (-2.55)	96.70 (0.86)	78
<u>Later members</u>						
(6) $Q/(1+X/Y)$		.0015 (3.75)	.0160 (5.16)	.1035 (3.79)	57.20 (5.61)	95
(7) $Q \times A/(1+X/Y)$		.0038	.0394	.2557	141.40	
(8) $Q \times B/(1+X/Y)$		.0048	.0498	.3229	178.61	
(9) $Q \times A/(1+X/Y) - .01Y$...	-.0004 (0.08)	.2282 (2.86)	157.84 (5.12)	27
(10) $Q \times B/(1+X/Y) - .002Y$	0503 (11.98)	.2708 (3.97)	131.21 (5.01)	92

For explanatory notes see end of table.

TABLE A.IV.1 (CONTINUED)

REGRESSION ANALYSIS OF VARIABLES IN THE FUND FORMULAS

Dependent variable quota (Q) Independent variable	National income (Y)	Imports c.i.f. (M)	Variability of exports (V)	Constant	R ² (per cent)
<u>Founding members</u>					
(11) $Q/(1+X/Y)$	.0062 (12.40)	.0086 (1.15)	-.1368 (0.98)	101.90 (1.56)	98
(12) $QxA/(1+X/Y)$	.0153	.0212	-.3379	251.80	
(13) $QxB/(1+X/Y)$	.0194	.0268	-.4269	318.10	
(14) $QxA/(1+X/Y) - .01Y$	...	.0868 (5.05)	-.0559 (0.12)	153.30 (0.75)	84
(15) $QxB/(1+X/Y) - .002Y$	...	.1706 (5.58)	-.2405 (-0.31)	-23.92 (-0.07)	86
<u>Founding members, less China, France, United Kingdom, United States of America</u>					
(16) $Q/(1+X/Y)$	.0088 (6.77)	.0033 (0.52)	.0183 (0.21)	68.72 (1.43)	84
(17) $QxA/(1+X/Y)$	.0218	.0081	.0456	171.11	
(18) $QxB/(1+X/Y)$	.0274	.0102	.0571	214.40	
(19) $QxA/(1+X/Y) - .01Y$	...	.0422 (2.87)	.0751 (2.27)	325.20 (2.37)	43
(20) $QxB/(1+X/Y) - .002Y$	...	.0685 (3.44)	.0950 (0.27)	429.30 (2.42)	52

Notes: A is a weight corresponding to the multiple of actual quotas implied by the Bretton Woods formula (2.49).

B is a weight corresponding to the multiple of actual quotas implied by the formula II (3.12).

T-values are shown in parentheses.

Table A.V.1

ANNEX V

Present and hypothetical 1/ voting shares of IMF members
with 100 per cent increase in quotas

Present constituencies	Present vote share	Hypoth. vote share	Present constituencies	Present vote share	Hypoth. vote share
Costa Rica	0.14	0.12	Bahrain	0.09	0.14
El Salvador	0.14	0.12	Iraq	0.40	0.90
Guatemala	0.16	0.14	Jordan	0.11	0.14
Honduras	0.12	0.10	Kuwait	0.65	0.97
Mexico *	1.29	1.31	Lebanon	0.08	0.80
Nicaragua	0.12	0.10	Libyan Arab Jamahiriya*	0.50	0.73
Spain	1.34	1.54	Maldives	0.04	0.03
Venezuela	1.58	1.61	Pakistan	0.71	0.71
			Qatar	0.14	0.38
Sub-total	4.89	5.04	Somalia	0.09	0.08
			Syrian Arab Republic	0.19	0.17
Bahamas	0.12	0.26	United Arab Emirates	0.35	1.24
Barbados	0.08	0.06	Yemen	0.07	0.16
Canada *	3.21	2.89	Yemen, Democratic	0.14	0.12
Dominica	0.04	0.04			
Grenada	0.05	0.04	Sub-total	3.56	6.57
Ireland	0.40	0.33			
Jamaica	0.21	0.20	Afghanistan	0.14	0.13
St. Lucia	0.05	0.05	Algeria	0.71	0.71
St. Vincent	0.04	0.04	Ghana	0.29	0.28
			Iran*	1.07	2.96
Sub-total	4.20	3.91	Morocco	0.39	0.38
			Oman	0.09	0.26
Brazil *	1.59	1.62	Tunisia	0.19	0.17
Colombia	0.49	0.48			
Dominican Rep.	0.17	0.15	Sub-total	2.88	4.99
Ecuador	0.20	0.19			
Guyana	0.10	0.08	Bangladesh	0.39	0.39
Haiti	0.09	0.08	India*	2.71	2.77
Panama	0.14	0.15	Sri Lanka	0.32	0.31
Surinam	0.10	0.08			
Trinidad & Tobago	0.23	0.23	Sub-total	3.42	3.47
Sub-total	3.11	3.06	Burma	0.21	0.20
			Fiji	0.08	0.06
Argentina *	1.29	1.31	Indonesia*	1.16	1.17
Bolivia	0.14	0.13	Lao People's Dem. Rep.	0.08	0.06
Chile	0.55	0.54	Malaysia	0.63	0.63
Paraguay	0.09	0.08	Nepal	0.08	0.07
Peru	0.42	0.41	Singapore	0.18	0.67
Uruguay	0.24	0.22	Thailand	0.46	0.46
			Viet Nam	0.25	0.24
Sub-total	2.73	2.69	Sub-total	3.13	3.56

Table A.V.1 (cont'd)

ANNEX V

Present and hypothetical 1/ voting shares of IMF members
with 100 per cent increase in quotas

Present constituencies	Present vote share	Hypoth. vote share	Present constituencies	Present vote share	Hypoth. vote share
Australia*	1.89	1.70	Ivory Coast	0.22	0.20
Korea, Rep. of	0.44	0.84	Madagascar	0.12	0.10
New Zealand	0.58	0.29	Mali	0.10	0.09
Papua New Guinea	0.11	0.10	Mauritania	0.08	0.06
Philippines	0.53	0.53	Mauritius	0.10	0.09
Seychelles	0.04	0.04	Niger	0.08	0.06
Solomon Islands	0.04	0.04	Sao Tome & Principe	0.04	0.05
Samoa	0.05	0.04	Senegal	0.14	0.12
			Togo	0.08	0.07
Sub-total	3.68	3.58	Upper Volta	0.08	0.06
			Zaire	0.39	0.39
Botswana	0.06	0.06			
Burundi	0.09	0.08	Sub-total	2.24	2.04
Ethiopia	0.12	0.11			
Gambia	0.06	0.05	Cyprus	0.12	0.10
Guinea	0.11	0.09	Israel	0.52	0.66
Kenya	0.20	0.19	Netherlands*	2.25	3.32
Lesotho	0.06	0.05	Romania	0.61	0.79
Liberia	0.13	0.11	Yugoslavia	0.69	0.69
Malawi	0.08	0.07			
Nigeria	0.88	1.07	Sub-total	4.19	5.56
Sierra Leone	0.11	0.09			
Sudan	0.24	0.23	Greece	0.47	0.38
Swaziland	0.07	0.05	Italy*	2.94	3.42
Tanzania,			Malta	0.09	0.07
United Rep. of	0.17	0.15	Portugal	0.44	0.82
Uganda*	0.16	0.14			
Zambia	0.37	0.36	Sub-total	3.94	4.69
Zimbabwe	0.27	0.26			
			Austria	0.81	0.87
Sub-total	3.18	3.16	Belgium*/Luxembourg	2.23	2.40
			Turkey	0.51	0.49
Benin	0.08	0.06			
Cameroon, United			Sub-total	3.55	3.76
Rep. of*	0.14	0.13			
Cape Verde Is.	0.04	0.04	Denmark	0.76	0.79
Central Afr.Rep.	0.08	0.06	Finland	0.65	0.47
Chad	0.08	0.06	Iceland*	0.11	0.09
Comoros	0.04	0.04	Norway	0.73	0.85
Congo	0.08	0.06	Sweden	1.09	1.49
Djibouti	0.05	0.05			
Equatorial Guinea	0.06	0.05	Sub-total	3.34	3.69
Gabon	0.11	0.16			
Guinea-Bissau	0.05	0.04			

Table A.V.1 (cont'd)

ANNEX V

Present and hypothetical 1/ voting shares of IMF members
with 100 per cent increase in quotas

Present constituencies	Present vote share	Hypoth. vote share	Present constituencies	Present vote share	Hypoth. vote share
<u>Others</u>					
Egypt	0.57	0.57	<u>Appointing countries</u>		
Rwanda	0.09	0.08			
South Africa	1.03	0.99			
Sub-total	1.69	1.64	China*	2.84	2.90
			France*	4.52	4.55
			Germany, Fed.Rep. of*	5.08	6.53
<u>Total electing countries</u>	53.73	61.31	Japan*	3.92	6.08
			Saudi Arabia*	3.31	5.69
			United Kingdom*	6.87	4.41
			United States*	19.68	8.60
			Sub-total	46.22	38.76

Note: * Indicates countries presently serving as Executive Directors.
 Details may not add to totals due to rounding error.

1/ These hypothetical estimates reflect the implications of distributing a 100 per cent increase in quotas along the lines discussed in the note in pp. 9-11 but without increasing basic votes. They do not allow for ad hoc adjustments which may be necessary in specific cases.

STRUCTURAL ADJUSTMENT POLICIES

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The Controversy about Macroeconomic Policy

The persistence of inflation combined with stagnation in the industrially advanced countries over a considerable number of years, despite the efforts of governments to overcome this problem, is a constant reminder of the fact that there are no simple formulas for stabilization programmes. Moreover the composition of such programmes inevitably involves controversy because of differences of judgment as to the appropriate distribution of costs and benefits between various social groups. Such judgments are of a political rather than technical character.

It is, however, often assumed that the analysis on which policy judgments are based can itself be made reasonably objective and relatively free of controversy. Unfortunately, this is far from the case. Economic analysis has never acquired the precision of the natural sciences, and the issues between rival schools has not even been narrowed over the years. On the contrary, the range of expert opinion on questions of economic policy is, if anything, wider today than at any time in the present century.

Typical of current controversy is the wide spectrum of opinion reviewed in the recent (third) report of the United Kingdom Parliamentary Treasury and Civil Service Committee. The following is a summary account of the views put forward to the Committee in oral and written evidence from the Treasury and the Bank of England, from other central banks, and from academics of varying persuasions:

"The committee found it useful to divide the opinions it received into four schools of thought: the 'new classical school' which, on the basis that prices and wages are flexible and that expectations are formed rationally, sees monetary policy as being quickly effective in reducing inflation with little impact on output and employment; the 'gradualists' who, although believing that inflation is essentially a monetary phenomenon amenable to monetary policy, accept that bringing inflation down involves some temporary cost to output and employment and therefore advise a gradualist approach; the 'pragmatists' who believe that use of monetary policy alone involves substantial cost in terms of output and

*June 1981.

employment, so that other policies (e.g. incomes policy) should be used; and the 'anti-monetarists' who deny the usefulness of monetary policy at all and see prices as being determined only by costs, not at all by demand, and very inflexible."^{1/}

Even the use of monetary targets has recently been questioned by the Group of Thirty, a group of distinguished central bankers, commercial bankers, business executives and academic economists meeting under the chairmanship of Dr. Johannes Witteveen, former managing director of the IMF. In its statement of 14 April, 1981, entitled "Measures to Combat Inflation", the Group expressed the view that "It is perhaps time to review critically recent experience with the use of strict quantitative targets for growth in the money supply, whether it is broadly or narrowly defined".

For all these reasons, it would appear unwise to draw up stabilization programmes as though the diagnosis of balance of payments problems is a straightforward technical matter, and as though the remedies for such problems can always be prescribed with objective certainty. The difficulties resulting from disagreement among experts both as to diagnosis and as to cure are further compounded by the severe limitations on the accuracy of short-term statistical indicators and by the enormous errors characteristic of the forecasting. There is a serious question whether the main objective of the IMF in setting performance conditions - namely to ensure the timely repayment of drawings - is in fact achieved by the methods employed. The fact that there have been no defaults on IMF loans does not mean that repayment was in fact guaranteed by the stabilization programmes that were adopted.

The IMF recognizes the need for adapting the composition of stabilization programmes to the particular circumstances of centrally planned economies. Flexibility of this kind is, however, also needed in approaching the diverse conditions prevailing in developing countries at various levels of development.

The Nature of Structural Disequilibrium and of Structural Adjustment

In any particular case, structural disequilibrium in the balance of payments may or may not be accompanied by excess aggregate demand.

In industrial countries, if one starts from a situation in which available resources are fully employed, an increase in aggregate effective demand above the capacity level may be said to involve excess demand. In developing countries, it is not possible to speak of full

^{1/}Geoffrey Maynard, "Mrs. Thatcher's economic policy and the Treasury committee", The Banker, May 1981.

employment of resources in the same sense as in industrial countries. This is because the capital stock of these countries is insufficient to employ all the available labour. While excess demand may, under such conditions, still be defined in relation to capacity levels of output, unemployment will persist even when such levels are reached. Particularly important is the balance between supply and demand for food and other essential wage goods. The level of demand may be said to be excessive when supplies of essential wage goods, especially food, fall short of requirements at that level.

Where structural disequilibrium is accompanied by excessive demand, disinflationary fiscal and monetary policies will be needed to curb demand. The structural disequilibrium will, however, call for separate measures.

While excess demand almost invariably exerts an upward pressure on prices, increases in prices are not per se adequate evidence of excess demand. They could equally be the result of cost inflation. Thus, for example, a rise in domestic prices that results exclusively from an increase in the cost of imports has nothing to do with excess domestic demand, and restrictive fiscal and/or monetary policies would therefore be out of place in dealing with the balance of payments consequences of such an increase.

Cases of structural disequilibrium are often confused with cases of excess demand. It is entirely possible for a country to encounter structural disequilibrium without any element of excess demand being present. Consider, for example, the case of a country in which the level of economic activity is well below the level consistent with capacity output. Such a country may encounter structural disequilibrium in its external accounts because of a persistent deterioration in terms of trade or because of a persistent decline in external demand for its traditional exports for reasons beyond its control. The application of disinflationary measures in a case of this kind will result in a further and gratuitous reduction in real income over and above the reduction resulting from the primary source of disequilibrium. In view of the unutilized productive capacity available, policy should rather be directed in such a case towards the promotion and diversification of exports.

The Causes of Disequilibrium

Structural disequilibrium is a term that has been used to characterize balance of payments deficits attributable to a variety of causes.^{2/} When the Extended Fund Facility was introduced by the

^{2/}The term "structural disequilibrium" can, of course, also be used to describe situations that do not involve any major disturbance in the balance of payments.

IMF in 1974, it was envisaged that recourse to the Facility might be needed in at least two different types of situation. One was a situation of structural maladjustment in production and trade in which, as a result of prolonged inflation in a particular country, distortions had developed in the price and cost structure that could not be removed easily or quickly. The second situation was that of an economy characterized by slow growth and an inherently weak balance of payments position preventing the pursuit of an active development policy.^{3/}

More generally, a situation of structural disequilibrium in the balance of payments may be said to arise when the imbalance is the result of frictions or rigidities that do not respond readily or quickly to the normal operation of market forces, or to standard macroeconomic policies, including exchange rate adjustment and demand management.

It is important to distinguish between structural disequilibrium of domestic origin and of external origin. Structural disequilibrium of domestic origin is normally due to one or both of two factors. On the one hand, the pattern of exportable supply may be ill adapted to the pattern of external demand so that it is difficult to raise the level of export proceeds in line with the growth of import requirements. On the other hand, there may be a low elasticity of substitution between imported goods and domestically-produced goods, while imports may be mostly of essential items, so that it is difficult to economize on imports at any given level of income, or to avoid a proportional or more than proportional increase in imports as income rises.

Most developing countries have unbalanced export sectors in the sense that their exports consist predominantly of a very few primary products. The Compensatory Financing Facility of the IMF is designed to provide assistance in cases of medium-term export shortfalls, often resulting from the fact that a relatively small decline in the demand for primary products tends to cause a relatively large drop in export proceeds. The Facility is now, however, intended to deal with longer-term difficulties that can result, for example, from shifts in the pattern of consumption of primary products. Moreover, owing to relatively low income and price elasticities of demand for many of these products, the scope for vigorous growth in export earnings is limited, and price competition may be counter-productive for individual exporters as well as for exporting countries as a whole. For all these reasons, developing countries are frequently faced with a rate of growth of export earnings that falls far short of the import requirements associated with an otherwise feasible rate of expansion of the economy as a whole. The solution to this problem of structural imbalance is diversification of exports, but this is a process that calls for structural adaptation, and takes time.

^{3/}See decision of the IMF Executive Board on the Extended Fund Facility, IMF Annual Report 1975, Appendix II, page 88.

Similarly, developing countries frequently encounter rigidities in the volume and structure of their imports. Such rigidities are often particularly serious in the case of food imports, as a result of deficiencies in the domestic agricultural sector. In the many cases where domestic agriculture is carried on under traditional auspices, without the various reforms that are indispensable in stepping up output and productivity, any expansion in demand resulting from industrial growth tends to spill over into the external sector. Market mechanisms or incentives are not, by themselves, very effective in providing a remedy for such imbalance. In many cases little progress can be made without far-reaching reforms, including changes in land tenure systems, development of the conditions for greater mobility of labour, provision of adequate extension services as well as of agricultural credit on reasonable terms, access to improved seed and other technological advances, introduction of modern transport and marketing facilities, and ready access to health, educational and recreational facilities as well as to incentive goods.

Structural disequilibrium of external origin may be due to a persistent inability of countries in balance-of-payments surplus to increase their import demand as rapidly as their export income. On the one hand, world demand for their exports may be exceptionally buoyant due to the fact that such exports consist wholly or largely of essential commodities in heavy demand, the leading example being oil, or of manufactures that are highly sought after because of their technological advantages or for other reasons. On the other hand, import requirements may be low, or rising only slowly, because of the increasing competitiveness or protection of domestic substitutes for imports.

At given levels of current-account imbalance, the surplus countries may be unable or unwilling to invest their surpluses abroad at long term, while the deficit countries may be unable or unwilling to attract long-term capital on the scale required to finance their current-account deficits.

In the past, imbalances due to inadequate effective demand in one or more countries were considered to be generally of a cyclical and hence reversible character. In recent years, however, stagnation at a relatively low level of demand has been experienced in a number of industrial countries over extended periods. The persistence of such stagflation, as it is called, has had a major impact on developing countries, and has made the adjustment process in the latter countries particularly difficult. This is because the dampening effect on the exports of many developing countries meant that most of their trade adjustment had to take the form of a reduction of their imports. Sectoral rigidities in the industrial countries, particularly in labour-intensive industries, aggravated their difficulties still further because of the protectionist restrictions introduced as a result.

Steps to Deal with Structural Disequilibrium

The first point to note about the steps required to deal with

structural disequilibrium is that they need to take into account the sources of such disequilibrium, whether domestic or external.

One of the most important aspects of the work of the Committee of Twenty was the emphasis that it placed on the importance of symmetry in the adjustment process, involving an equitable distribution of the burden of adjustment as between surplus and deficit countries. It was, in fact, a lack of such symmetry that had been one of the most important factors leading to the breakdown of the Bretton Woods system.

The fact that a comprehensive programme of international monetary reform has not thus far proved feasible does not mean that the principle of symmetry can be neglected. The case for symmetry is all the more pressing in view of the fact that the stronger countries are in a position to shift much of the burden of adjustment to the weaker countries through such measures as protectionist restrictions on imports and high rates of interest on foreign lending.

In practice, however, the fact that effective measures to ensure symmetry have not been agreed upon internationally tends to be interpreted as requiring the deficit countries to bear the entire burden of adjustment. Important progress has been made in enlarging access to IMF resources and in lengthening the periods over which Fund drawings may be repaid. But the severity of Fund conditions has been considerably increased as compared with the 1970s in the sense that while in the 1970s three-quarters of IMF lending was at low conditionality and only one-quarter at upper credit tranche conditionality, at the present time these proportions have been almost exactly reversed.

It is, of course, always possible to eliminate a structural balance-of-payments deficit if a sufficiently far-reaching programme of retrenchment is introduced. The consequential curtailment of imports, however, almost inevitably involves serious disruption of other objectives, namely the objectives of rising standards of living, improved distribution of income and increased investment in productive capacity. The IMF Articles of Agreement do not suggest that equilibrium in the balance of payments is an objective to be sought for its own sake regardless of all other considerations. On the contrary, Article I sets out a series of objectives for the IMF, without any indication that any of them can be neglected or subordinated one to the other. Consequently, the task of the international community is to achieve a satisfactory reconciliation of the various objectives set out in the Articles and, in particular, to reconcile the requirements of balance-of-payments equilibrium with those of long-run development.

A further consideration regarding the steps required to bring about structural adjustment is that there is no presumption that such steps can or should be limited to macroeconomic measures in the field of exchange rates, or of monetary and fiscal policies. A variety of methods may be needed in bringing about structural adjustment. The following sections will deal with some of these methods.

Some Major Sectoral Problems

Most developing economies are affected by sectoral maladjustments that do not yield easily or quickly to general, aggregate incentives. Sectoral problems can be tackled most effectively and efficiently through pinpointed programmes having at least medium-term horizons and comprising ad hoc packages of public investment as well as incentives for private action. Some examples of sectoral problems will be discussed below. They have been selected because of their importance in relation to the balance of payments of many developing countries.

Energy

Few sectors illustrate the need for long-term planning and co-operation between the public and private sectors as clearly as energy. Energy investments have gestation and yield periods going well beyond the duration of contracts in any existing futures markets; in this respect it is difficult to understand what one could mean by "leaving it to the market". In some cases, such as projects involving atomic energy, national and international externalities can be significant and substantial. The equilibrium price of energy is singularly difficult to establish, and there has been much debate as to whether energy prices since 1973 are or are not equilibrium prices.

Be that as it may, adjustment to the post-1973 international energy prices is still continuing and the balances of payments of many developing countries depend crucially on those prices and on the quantity of energy imported. For these countries, sound structural adjustment programmes are likely to call for a mix of conservation measures, using but going beyond sensible domestic energy prices, the encouragement of public and private investment within the framework of a long-term energy plan, and in some cases special research efforts.

Food

As with energy, food constitutes one of the least price-elastic components of the import bill of many developing countries. Abrupt changes in the price of food, whether due to international or to domestic policy causes, can have important effects on the welfare of large numbers of people, without having significant allocative consequences in the short run. This is not to deny that appropriate food price measures are important components in complete medium and long-term structural adjustment programmes.

Non-price measures are also likely to be part of well-designed programmes for the food sector. When both income distribution and efficiency goals are taken into account, it is not always true that general output price incentives are instruments that are superior to selective subsidization of inputs into the food sector. Food production

and distribution also have to rely on irrigation, road transport, and distribution facilities which often require, by their very nature, collective action calling for public investment and co-ordination.

The experience of industrialized countries such as the United States also shows that sustained technological change in agriculture requires public support for research and extension facilities - activities where externalities and non-appropriabilities make them unsuitable for private enterprise.

Finally, one may note that historically a skewed distribution of land has been an important obstacle to a fast expansion of food supplies in two ways. Large landowners have frequently been lethargic in responding to price incentives and in adopting new techniques. But more important, perhaps, is the fact that increased prices for food under conditions of latifundia mainly benefit the landowners, and have an adverse effect on income distribution, and this may deter governments from using the price incentive. It is remarkable and regrettable that land taxes, which are highly desirable both on efficiency and on income distribution grounds, have very seldom appeared in stabilization plans.

Export Diversification

This is a sectoral problem that is somewhat different from food or energy. Diversification should probably involve many different types of goods and services, including both primary and manufactured goods. Several countries have already shown that export diversification can be accomplished fairly quickly, although it would be unreasonable to expect that much could be achieved in a short run of, say, one year. Successful countries have typically employed a wide array of policy instruments, including export subsidies, despite international opposition to the latter device. As with food and energy, ad hoc policy packages aimed at achieving sectoral goals seem to be more effective in securing export diversification than general, across-the-board measures.

The logic of selectivity in export promotion arises from the structural heterogeneity of most developing countries. Typically, a limited number of activities in these countries have a clear comparative advantage; other potential exporting sectors follow them at great and irregular distances in terms of productivity. Incentives to induce new exports from the latter sectors are apt to generate large rents among traditional exporters. In some cases, export taxes combined with uniform exchange rates (undervalued from the viewpoint of traditional exports) may be appropriate policies; multiple exchange rates could also be a logical way of handling the transition to export diversification. In view of the emphasis placed by the IMF on exchange-rate unification, and the potentially inflationary effects of across-the-board devaluations, selective export subsidies seem highly desirable in principle. One may also note that unpredictable, sporadic and selective protectionism in industrialized countries strengthens the case for developing country selectivity in export promotion.

The experience of industrialized countries is also instructive in this area. The export promotion efforts of those countries include substantial subsidies through export credit schemes; use of the diplomatic infrastructure to support exporters, including during the foreign visits of heads of state; and state-to-state sales of commodities such as grain and weapons. There are few countries indeed where export promotion is "left to the market".

Export diversification efforts in many developing countries have involved, especially during their early stages, significant social costs, which may be regarded as investments in "infant exports". It would be ill-advised to jeopardize export gains by sudden policy reversals, whether or not they are induced by external pressures. Greater flexibility in the permissible tools for developing country export promotion, including judicious use of export subsidies, should be embodied in structural stabilization plans. Such subsidies should naturally be undertaken only in the light of long-term development goals and careful social cost-benefit calculations. Eventually, international agreements on trading "rules-of-the-game" should embody these principles.

The Role of the Public and Private Sectors

It is often suggested that in mixed economies the expansion of the government sector beyond a certain level inevitably diverts resources from the private sector, and hence tends to depress the rate of growth of productivity of the economy as a whole. This is because productivity growth in the private sector is believed to be more rapid than in public and other non-traded services, where the absence of market mechanisms raises questions about the efficiency of resource use. These considerations are cited in support of the view that important benefits can be derived, especially by countries in balance-of-payments difficulty, by channelling resources away from the public sector and into the private sector.

This reasoning is based upon a number of questionable assumptions. Perhaps the most important of these is that the public sector competes with the private sector not only in the sense of pre-empting supplies of inputs that could otherwise be used for private sector activities, but also in the sense of generating outputs that substitute for the outputs of the private sector. However, as noted previously, the outputs of the public sector in the mixed economies are to a large and probably predominant extent complementary to those of the private sector, and indeed indispensable to them. This is not obvious in regard to law enforcement and public administration, but it applies equally to the provision of postal, transport and other public services. The fact that many government services are not traded, and that their output can therefore be measured only at factor cost, does not, as often appears to be assumed, create any presumption that such services are supplied at a low average level of productivity. But even if they were, it would still be true that where private sector activities depend on services provided by the public sector, it is unlikely that the productivity of the economy as a whole could be increased by shifting resources away

from the public sector. Such a shift could, on the contrary, slow down the productivity growth of the private sector.

Another questionable assumption often made in this regard is that conventional measures of productivity in the private sector are indicative not only of the private gains to be made, but of the social return as well. Such measurement may, however, give little clue to the magnitude of social returns because private costs and benefits may differ greatly from social costs and benefits. As is well known, for example, industries do not bear the full costs of any pollution they may cause, and measurements of their productivity are, to this extent, misleading as a guide to social returns. The view is sometimes taken that the easing of government anti-pollution controls relieves the industries concerned of substantial costs that interfere with productivity growth. This view, however, deals only with the level of private returns.

Such empirical evidence as is available suggests that there is no general rule about the relationship of productivity in the public sector to that in the private sector, and that much depends on the particular country and period examined and the specific criteria selected. In any case, in many member countries of the IMF, public enterprises engage in many directly productive activities as a matter of general policy.

Adjustment Policies

There are several types of economic policy that tend to figure prominently in stabilization programmes. They include monetary, fiscal and exchange-rate policies, financial reforms, incomes policies and general pricing policies. Experience in developing countries shows that, if stabilization programmes are to be consistent with other government priorities, there is a need for selective policies. Sustained growth as well as considerations of equity require selective policies that deal with sectoral imbalances and allow for asymmetries in the adjustment capacities of regions, sectors and social groups within each country.

(a) Monetary and fiscal policies

The regulation of aggregate demand is a key element in any programme for dealing with demand-induced inflation. However, one lesson of the experience gained in this field is that under certain conditions demand management can be costly and self-defeating in the long run. In some cases, stabilization programmes start from situations in which there is an actual deficiency of effective demand in real terms. Even when inflation is attributable to demand pressure, other factors rapidly come into play. Thus, the remedy for inflation cannot be limited to the management of aggregate demand. Failure to recognize this fact has led to heavy costs in terms of output foregone. Furthermore, indiscriminate use of non-selective monetary and fiscal policies may add to the burden of adjustment costs in the process of stabilization.

Fiscal and monetary management should be consistent with a reasonably high utilization of capacity and with a rising level of output. This calls for selective credit and fiscal policies that help to reduce the cost of adjustment, to limit the burden borne by the least flexible activities and the least mobile workers, to tackle bottlenecks and to maintain a level of public and private investment that facilitates the process of adjustment and keeps output capacity growing.

(b) Exchange rate and trade policies

Developing countries have made greater use of exchange rate policy since the mid-1960s and this has contributed to an improvement in the performance of their external sectors. Nonetheless, there are limits to the extent to which exchange-rate policies can ensure the achievement of balance-of-payments equilibrium in a manner that is consistent with the attainment of other national goals. This is particularly true in the case of low-income countries with non-diversified and inelastic exports. The effectiveness of national exchange-rate policies is further limited at the present time by the recessionary forces prevailing in world markets. Excessive reliance on exchange-rate adjustment in a stagnant international environment may involve a danger of competitive devaluations.

The increased reliance on private capital movements instead of official flows has made the capital account more sensitive to short-run changes, thus complicating management of monetary policy, and creating pressures for exchange-rate adjustments that tend to misallocate resources. If consistency of various policy goals is to be achieved, some regulation of capital movements would seem to be required rather than the indiscriminate freeing of such movements.

(c) Financial reform

In many areas of economic policy, the "optimum" is different from the maximum. One such area is that of financial reform. While monetization and "financial deepening" generally contribute to growth in the early stages of development, at later stages experience seems to be very heterogeneous.

Freezing of nominal interest rates in a setting of persistently high inflation induces misallocation of investment resources, punishes mainly small savers, and principally benefits large borrowers.

On the other hand, the financial sector can over-expand, especially in an inflationary environment, if the sector is abruptly and extensively liberalized. A probable outcome of such a policy is a sudden overshooting of interest rates, an increase in the spread between lending and borrowing rates, a growing predominance of short-term transactions, and the discouragement not only of inefficient investment

but also of activities would be efficient under normal conditions.

What is needed is the kind of reform that increases the access to financial resources of potential investors on a long-run basis, at stable real rates of interest. This implies - especially in an initially inflationary environment - a gradual and selective financial reform.

(d) Incomes policies

In complex inflationary processes accompanied by substantial uncertainty, there is need for an incomes policy in order to slow down cost inflation and dampen inflationary expectations. Accordingly, some kind of incomes policy has frequently been an ingredient of stabilization programmes. More often than not, real wages have been reduced, even in cases where they had not previously risen excessively, or where they were already depressed in real terms.

Once again, an appropriate balance must be struck between various objectives, not only for reasons of equity but also in the interests of long-run efficiency and the stability of the results to be achieved. To that end, incomes policy should cover all forms of earnings and not wages alone.

(e) Pricing policies

Monetary, fiscal, exchange-rate, interest-rate and incomes policies have allocative and distributive effects, as well as effects on expectations, which appear to play a crucial role in stabilization programmes. Undue emphasis on a single variable as a regulator of expectations tends to limit the effectiveness of the programme and to generate adverse secondary effects. For example, excessive reliance on monetary control may bring about a deeper recession than would otherwise be necessary.

On the other hand, a sweeping liberalization of price controls, especially under inflationary conditions, usually leads to an overshooting of upward price adjustments, as well as to instability in relative prices, owing to divergent price expectations in various sectors of the market. The avoidance of overshooting requires price guidelines for certain categories of goods and services during the period of stabilization. These guidelines need to be consistent with the overall management of variables affecting aggregate supply and demand.

Finally, specific price regulations may be necessary in order to achieve industrial and regional policy objectives as distributive devices and as regulators of consumption patterns. If such regulations

are well designed, so far from leading to distortions of the price system, they could be viewed as adjustments capable of compensating for the distortions and disequilibria that are typical of countries at low levels of development.

(f) Selective policies

It was noted that in a number of sectors, such as food and energy, considerations of both efficiency and income distribution indicate the desirability of including selective policies in well-designed structural adjustment programmes. Here it will suffice to recapitulate the most important measures of this type:

1. Public investment to tackle specific bottlenecks and to support incentive programmes. Examples would include irrigation works, harbour facilities, storage and warehouse facilities. Certain types of public current expenditure could be included here, such as special training programmes.
2. Subsidies discriminating between products as well as between the destination of sales. Examples would include subsidies to seeds and fertilizers, to non-traditional exports, and to low-income or aged consumers.
3. Selective taxes, such as those on land, on luxury consumption, and on extraordinary capital gains.
4. Selective tax and credit incentives to support high priority private investment and other expenditure. Care must be taken to tailor these measures to the particular goals desired.
5. Integrated export promotion programmes, going beyond export subsidies. Such additional measures could include the support of trading companies, export credits and the development of infrastructure for exports.
6. Support for research into energy and food production problems specific to each country.

Implications for the Content of Adjustment Programmes

Each of the earlier sections dealt with a sub-set of factors whose nature and weight in the current and prospective economic environment add greatly to the complexities involved in formulating an appropriate mix of adjustment policies.

The structural elements that are so prominent in the disequilibrium of the current period make it essential that the limitations of demand management policies in reducing present and prospective deficits are fully understood, with a view to avoiding excessive and unwarranted adjustment costs. These structural considerations point to the need for

stabilization programmes to be supported by selective policies designed to reduce sectoral imbalances so as to minimize the loss of growth in restoring equilibrium in the external accounts. The potential for reducing deficits by such selective policies differs greatly from country to country and from sector to sector.

It is now accepted that the country mix of demand and supply policies must take into account the political and social system and those features of the institutional environment that are associated with that system. There is little disagreement, at least in principle, that short-term adjustment policies should be consistent with the requirements of longer-term development. It should also be recognized that differences in the political and social systems of various countries imply corresponding differences in the pattern of longer-term development of their economies.

While proper allowance for these social, sectoral and developmental considerations is indispensable in ensuring political realism in the approach to adjustment, it also has the effect of substantially complicating and differentiating the structure of trade-offs between the various policy instruments employed in the adjustment efforts of different countries. Only too often there is an enormous discrepancy between the precision of macroeconomic advice, on the one hand, and the complexity of the environment in which the policies are to be implemented, on the other. The deterioration in the international economic situation has both tightened the constraints on policy options and has increased the social and economic cost of misguided action. All these factors point to the need for extreme prudence and flexibility in the design of adjustment programmes. They also suggest that the international community should refrain from detailed advice as to the domestic policies required to bring about improvement in the balance of payments. This calls for reconsideration of the design of policy commitments included in adjustment programmes.

The International Interest

The general purposes of the IMF notwithstanding, in practice the economic policies of a small country, whether developed or not, become a matter of concern for the international financial community in an operational sense only if the country experiences a balance-of-payments deficit of a size that cannot be financed by "autonomous" capital inflows. At the global level, the international community seeks to reduce balance-of-payments deficits to magnitudes that are supportable through the existing and prospective financial arrangements. So far as individual deficit countries are concerned, the international community has a well-founded interest in reviewing the major factors that determine the size and likely duration of a deficit country's claim on additional financial resources.

The amount and terms of balance-of-payments financing - of which drawings on IMF resources are only a part - and the length of the period

of adjustment, implicitly reflected in the duration of such financing, determine the extent to which the international community is willing to alleviate the burden of adjustment. (As noted earlier, this also reflects the extent to which the surplus countries are prepared to accept their own obligations to co-operate in a symmetrical adjustment process.) For its part, the deficit country should provide credible assurances that its deficit will be gradually reduced to a sustainable level within a reasonable period. In addition, the country should co-operate with the IMF on questions of foreign exchange and trade regulation and should undertake not to introduce additional restrictions in these areas for balance-of-payments reasons, except where the consequence would be a larger reduction in real income than would otherwise be necessary.

These considerations both provide the justification and set the limits to the legitimate scope for external involvement in the economic policies of deficit countries.

Targets and Performance Criteria in Adjustment Programmes

(a) International aspects

It follows from the preceding section that discussion and agreement between the authorities of the deficit country and the IMF should focus on the outlook and targets for the balance of payments and on the observance of certain minimum commitments with respect to international economic behaviour during the adjustment process.

Arrangements with the IMF should continue to include quantitative targets for the current-account deficit, the amount of external borrowing and a minimum level of international reserves.

The observance of the undertaking regarding foreign-exchange and trade restrictions mentioned above should also remain among the performance criteria. This co-operation could include gradual elimination of any payments arrears, non-discrimination among countries, and transparency of foreign-exchange, trade and investment policies. Such transparency would imply regular provision of information on the country's objectives and policies in these areas.

The central conclusion of this paper is that the management of interactions between domestic and external variables should be left to the discretion of the authorities of deficit countries. On the other hand, a reduction in the specificity of requirements regarding domestic policies might be accompanied by greater specificity regarding the external sector, notably through the formulation of subsidiary targets. These might include variables that respond to government policy such as a certain minimum improvement in export performance, particularly in the non-traditional export sector where feasible, and certain limits to the degree of import contraction, consistent with projections of demand and

the likely speed of structural adjustment.

(b) Domestic aspects

Recognition of social, sectoral and development considerations as being pertinent to the design of adjustment programmes introduces a multiplicity of economic sub-objectives and of constraints to the use of various policy instruments. Given the structural nature of present deficits, it is vital that the adjustment effort be sustained over a medium term. Such prolongation of the adjustment effort makes it all the more important to ensure the political feasibility of adjustment programmes, and adds weight to the consideration that they should be as specific and as differentiated among countries as the authorities of these countries consider necessary.

Co-operation with the IMF is such that all relevant macroeconomic policies may be discussed and useful advice accepted. However, it is essential that the need of many countries to adjust to structural changes in the world economy - the greatest single cause of present disequilibrium - should not be used as an excuse for greater interference in domestic, social, institutional and developmental priorities and the policy mix arising from such priorities.

Deficit countries should be entitled to formulate their programmes of domestic adjustment with maximum freedom in the use of various policy instruments and institutional arrangements. The only criterion for the effectiveness of a programme that may properly be a matter for consideration by the international community is whether the programme involves a measure of effort that is broadly consistent with the balance-of-payments target agreed upon.

In a more operational sense, this would imply that a letter of intent would contain a comprehensive macroeconomic and sectoral programme together with the policies required to implement it. The national authorities could be requested to propose some quantifiable targets for policies included in the programme that would in their view serve as intermediate performance criteria. It is likely, however, that consistency between the programme proposed and the balance-of-payments target agreed upon will not be verifiable until the programme is already under way. The extended IMF arrangements provide sufficient time to permit such verification to be phased over the period of the programme. In the initial stages, the IMF should be prepared to give the country the benefit of the doubt as to the consistency of the programme with the balance-of-payments target. This consistency would, however, be monitored at appropriate intervals. If performance on external account proved to be satisfactory, the domestic variables and policies would no longer be required as performance criteria. If, however, the expected improvement in the balance of payments did not materialize, there would be a review of the programme in the course of which agreement would be reached on an intensification of the domestic adjustment effort and/or the amendment of the balance-of-payments target, particularly in the light of any unforeseen development in the external environment.

THE ROLE OF DEVALUATION IN THE ADJUSTMENT OF BALANCE-OF-PAYMENTS DEFICITS

Professor N. Kaldor*

1. Since the early 1970s acute external payments difficulties have become widespread among the developing countries, necessitating borrowing from both official and unofficial sources. In large part these deficits were the counterpart of the large balance-of-payments surpluses of some of the oil-producing countries, amounting to over \$100 billion in 1980. The rise in oil prices that generated these surpluses might have been expected to affect various countries according to their share of world oil imports. In fact, however, the current account of some of the less developed countries deteriorated to a disproportionate degree, owing to various measures adopted by developed countries to protect their own balances of payments which had unfavourable repercussions on the more vulnerable nations, and also to the fact that the non-oil producing developing countries were not able to supply more than a relatively small proportion of the increased import requirements of the oil-exporting countries.

2. In addition, a number of countries experienced acute balance-of-payments difficulties for other reasons, of which the most important (though perhaps also the most disputed) were those arising out of their own domestic policies. The most common causes - at least in the view of some authorities such as the International Monetary Fund (IMF) - were excessive pressure of demand, often resulting from overspending by governments, financed by budgetary deficits; and increases in money wages that could take place even in the absence of a state of excess demand. These demand and cost pressures led to inflationary increases in prices as well as to external imbalance. They added to the demand for imports and had an adverse effect on exports, since more of the goods (particularly foodstuffs) that could have been exported were consumed at home. There could also be "substitution effects" in so far as imports were brought in not only to supplement but also to substitute for domestic products; while in foreign markets exports might suffer on account of the substitution of other countries' exports of the same goods, sold at more favourable prices.

3. The standard prescription recommended by the IMF in such cases - and which is normally made a condition for providing financing assistance - is that the country should undertake a programme of financial retrenchment, involving budgetary and credit restraints phased according to an agreed timetable; that it should liberalize its foreign trade regime (reducing or abolishing both import prohibitions or restrictions and export subsidies); and that in order to make all this possible it

should undertake a substantial devaluation. The latter is recommended not only, or even mainly, for its effect on a country's "competitiveness" in foreign trade - for the foreign balance may be insensitive, at least in the short run, to changes in the exchange rate - but as a supplement to budgetary measures in bringing about a reduction in domestic demand and consumption. A devaluation, by making all imported goods (and their substitutes) dearer in relation to wages, causes a decline in real wages which could in itself be more effective in bringing about a reduction in consumption and a shift in the internal distribution of income than any domestic (fiscal and monetary) measures.

4. The main objection to this approach is that it assumes that devaluation is capable of changing the critical price and wage relationships within a country in an effective manner, even when domestic fiscal and monetary policies are incapable of bringing about these results. But it cannot be taken for granted that the internal distribution of income, which is the outcome of complex political forces, can be effectively changed by devaluation. It is more likely that a large-scale devaluation will cause an internal price upheaval (at the cost of a great deal of additional inflation) which will end up by reproducing much the same price relationships - between prices and wages and between internal and external prices - as prevailed before the devaluation. This outcome is, of course, far more likely in developing countries where the gap in the standard of living between the urban and rural population is high and where modern industry (or the so-called "organized" sector of the economy) extends to only a segment of the population. In industrially developed countries (particularly the large economies) devaluation is more likely to succeed in lowering the real exchange rates, at least for a certain period - but here experience has shown that the effect of real devaluation is far less important in changing export-import relationships than had generally been assumed. ^{1/} In the case of the developing countries - particularly in Latin America - the effect of numerous large devaluations in the post-war period, many of them introduced on the recommendation of the IMF, was to set in train a new inflationary wave which largely nullified the impact of the devaluation on price relationships within a period of 12 to 18 months.

5. Many developing countries have followed a policy of industrialization through import substitution, which in the early stages of development often has the effect of raising industrial production and employment at a very rapid rate. The manufacturing output of 19 Latin American countries increased nearly five-fold from 1950 to 1974, corresponding to an annual growth rate of 6.9 per cent. ^{2/} But this was achieved with the aid of import restrictions of various kinds (both through tariffs and more often through the licensing of imports either directly or through foreign-exchange allocations) while the percentage of industrial output exported actually declined from its initially low level. In the case of the three largest countries (Brazil, Mexico and Argentina) which accounted for about three-quarters of the total manufacturing output of Latin America, the percentage exported declined from 5.7 per cent in 1950 to 4.5 per cent in 1970. ^{3/}

6. These export percentages are much too low to make self-sustaining

industrial development possible. The main reason for this is that, precisely because manufacturing output is an addition to the total productive activities of the country (and not a substitute for other activities), it sets up additional import requirements that are partly temporary and partly of a recurrent character. It is, of course, well known that investment in industrial capacity has a very high import content, since the plant and equipment - which may make up 60 per cent or more of the total investment outlay - must be imported from abroad. But apart from periodic imports of equipment, manufacturing activity is likely to call for the import of various raw materials, semi-processed goods and components on a continuing basis. The natural source of finance for these continuing imports is to be found in manufactured exports. Such import requirements vary a great deal from industry to industry and are likely to be much larger at the earlier stages of industrialization when the production of intermediate products (components, etc.) is not so well developed as the production of finished goods. For that reason, a country's industrial development will be assured on a self-sustaining basis only when it succeeds in attaining an export level of manufactured goods which, besides making allowance for the additional import requirements associated with higher levels of real income, is at least equivalent to the import content of manufacturing output less any replacement of previously imported manufactures.

7. The import requirements of manufacturing industries could, of course, be financed out of surpluses earned from exports of primary commodities. In the case of exported minerals, particularly oil, expanding markets abroad might well provide resources adequate for this purpose. Food exports, on the other hand, are less likely to generate such resources on a continuing basis. With the expansion of industry, the proportion of workers employed outside agriculture inevitably increases, so that unless agricultural production is developed at a faster rate, industrial development will lead to a gradual decline in agricultural exports and may, indeed, lead to a country becoming a net importer of food at a certain stage. The excessively inward orientation of the industrialization of Latin America therefore resulted in a chronic shortage of foreign exchange, which necessitated the restriction of imports for balance-of-payments reasons (rather than for protectionist reasons) and meant that the importation of all kinds of goods was restricted, even when these were complementary to domestic products and not substitutes for them. Where imports of raw materials and semi-processed goods were restricted, this was a persistent cause of delays and inefficiencies; but where foodstuffs were restricted, it was a cause of chronic shortages to the urban consumer which, no doubt, were the main explanation of the violent inflationary tendencies in many of these countries.

8. The problem was aggravated by the desire of governments to moderate the rise in the urban cost of living. To this end, they set the buying prices for agricultural produce at low levels and this led, in many cases, to a slowing down of agricultural improvements or even to stagnation, just when an accelerated increase of agricultural production was required. The only countries that were able to avoid this problem were those like Mexico that managed to secure, through a thorough land

reform and large-scale irrigation, a rapid increase in agricultural production, or those like Venezuela that, owing to their income from exporting oil, were able to import as much food as was required to keep food prices from rising.

9. Contrary to a widespread view, exchange devaluations would not have been capable of solving this problem except, perhaps, in the extreme case when they were combined with the complete abolition of import restrictions and a deflationary policy sufficiently severe to make it possible to keep the exchange rate stable under such conditions. In this case, however, industrial development would have been sacrificed in the process and the scope for urban employment would have been greatly diminished. 4/

10. Nevertheless, in retrospect, it could be argued that the industrial development of Latin America would have been more successful if countries had managed to increase their industrial exports at a much faster rate, even if that involved a slowdown in the pace or the comprehensiveness of their industrialization - as it might well have done if efforts had been concentrated on a more intensive development of a narrower field necessary for developing export markets. All industrially-developed countries developed their industries through import substitution, secured by protection; the successful industrializers were those who managed to develop an export capacity once the industries established with the aid of protection attained an adequate level of efficiency. This required (a) that the initial measures should be carefully selected so as to foster the most promising industries; 5/ and (b) that the level of wages in the import-substituting countries should be low relative to that in the countries whose markets the newly industrializing country hoped to penetrate. (Germany, Japan, Sweden, Norway and a number of other countries provide excellent examples of industrialization by means of such an "outward strategy".)

11. Given a strategy of this kind, industrialization would probably have proceeded at a slower pace in terms of employment creation, but with less pressure on the balance of payments and hence less need for import restrictions. For it is the severity of the balance-of-payments constraint 6/ which causes violent inflation - no country which was not compelled to restrict imports for balance-of-payments reasons as distinct from protectionist reasons, suffered from major inflations. The balance-of-payments constraint also led to inefficiencies in production, owing to the scarcity of components, spare parts, etc. and the frequent breakdowns in the production process which severe import restrictions, necessitated by the scarcity of foreign exchange, generally entailed.

12. There can be no doubt that a régime of universal free trade, so far from causing participants to approach the same or a similar level of economic well-being (as the classical theory of comparative costs suggests), tends on the contrary to accentuate the differences between "rich" and "poor" nations. This is because only the industrially-developed countries are capable of securing full employment and a high

real income per head. Moreover, any initial advantage in industrial development is likely to be enlarged as a result of free access to foreign markets, and this same process tends to inhibit the industrial development of other countries that were initially behind in their industrialization.

13. The main reason for this outcome is the existence of economies of scale in the manufacturing industry and the increasing returns gained from learning and experience in terms of improved know-how, marketing and managerial ability. As a result of these, any newly industrializing country is bound to be under a severe handicap in competition with industrially more developed countries, in terms of the comparative productivity of both men and machines as well as such "non-price" factors as quality of design and technical reliability. The fact that the newly-industrialized country will normally possess the advantage of lower wages (in terms of a common currency) is unlikely to afford more than a partial compensation for these handicaps. Hence protection is essential for the promotion of the industrialization of the developing countries, but such promotion could take the form of subsidies to exports as well as duties (or a system of licences) on imports. For this reason, a combined system of import protection and export subsidization is preferable to import protection alone, since it serves to offset the adverse effect of protection on domestic costs not only in the home market but also in foreign markets. 7/

14. Devaluation is often looked upon as a combination of a flat ad valorem import duty and an equivalent ad valorem subsidy on exports. Yet devaluation is not an appropriate instrument for promoting industrialization - for the simple reason that just because it applies to everything (to all imports and exports) it does not permit the adaptation of the structure of domestic costs to the relationship of world prices, which is a necessary condition for making domestic goods competitive with foreign goods. The chief obstacle to the industrialization of the developing countries is not that their costs are in general too high (though that might be true as well) but that their costs of producing manufactured goods are high in relation to their costs of producing primary commodities. Consequently, the exchange rate that would be necessary to afford adequate protection in the home market for manufactures and an adequate incentive to exports to foreign markets would be strongly inflationary in terms of foodstuffs and other primary products. Such an exchange rate would be feasible only if the level of wages in terms of wage goods (i.e. in terms of foodstuffs) could be reduced to the point at which the structure of domestic costs would be aligned to the relationship of world prices. However, a system of dual exchange rates with a low exchange rate applicable only to exports and imports of manufactures represents an appropriate instrument for the promotion of industrial development; it could, in principle, be pursued as well through a combined system of import tariffs and export subsidies as through a system whereby exporters of manufactures would be entitled to sell their foreign currency proceeds at a special rate while importers of manufactures would be required to buy foreign currency at that rate. 8/

15. The introduction of this system would confine general devaluations to those cases in which, as a result of internal inflation, the cost of production of a country's staple exports (whether they consisted of cash crops, tropical or temperate foodstuffs, or mining products) had got seriously out of line with the world prices of those products, when expressed in terms of local currency at the prevailing rate of exchange.

16. Since the main element of costs (or of that part of costs which enters into the "value added" by domestic operations) is the cost of labour, this amounts to saying that an exchange-rate adjustment may be called for if, and only if, the labour cost per unit of output (including a certain allowance for profit) of a country's main export product comes to exceed the world market price of this product when converted at the official rate of exchange. Since in a large number of cases the staple exports consist of the products of self-employed workers, "labour costs" should be defined in such cases by reference to actual earnings in former periods (when the exchange rate was not over-valued) expressed in terms of the export crop, or by reference to the prevailing level of wages paid to contractual employees doing the same type of work. If a currency becomes over-valued in the above sense, protective measures aiming to aid industry might be unavailing for counteracting an erosion of a country's export potential in primary products.

17. It is often suggested that the price-cost relationship in the primary sector is not important from the point of view of a country's exports, and hence would not justify a general devaluation. This is partly because the domestic elasticity of supply of such products is small and unresponsive to changes in export prices; and partly also because the export price received in terms of foreign currency will be the same, irrespective of a particular country's exchange rate, so that devaluation will not have the effect of stimulating world demand for the particular product. However, these propositions are likely to hold only within certain limits; outside these limits, an over-valued official rate could represent a serious handicap to the maintenance or expansion of the amount produced and exported. It is often suggested that the supply of cash crops - particularly of tree-crops such as coffee, cocoa, etc. - is wholly inelastic in the short run since any increase in production presupposes an increase in the area of cultivation (or at least the replanting of trees) which requires a number of years before they lead to an increase in production. However, it is possible for the price received by farmers to fall so seriously in real terms that the farmer no longer finds it worth his while to harvest the full crop. In such a case, he may prefer the saving of effort or additional leisure to the meagre addition to income which is all that he could obtain if he exerted his full effort. It may also become advantageous for him to reduce time spent on the cultivation of cash crops and devote more time to subsistence farming. 9/

18. According to the IMF 10/ a number of African countries south of the Sahara have pursued policies that were detrimental to the production of their exports and landed them in balance-of-payments difficulties, necessitating severe curtailment of imports. There was also a general

over-valuation of currencies resulting from rapid rates of domestic inflation. In most of these cases, however, the inflation was the result of a redistribution of income from the rural to the urban population, achieved through the imposition of an internal price system which was disadvantageous to the economically most important but politically least organized sector of the population, consisting of the peasant producers of cash crops, and which benefited the fast-growing commercial class and newly-established bureaucracy in the towns. This meant that the local currency price of the export crops, delivered to a marketing board or co-operative, was well below the local currency equivalent of the net export proceeds even at the official rate of exchange. In many cases it was not the general over-valuation of the currency but the internal redistribution of income that was responsible for causing the farmers' earnings to fall below the levels necessary to maintain activity. A devaluation would have increased the local currency proceeds, no doubt, but there is no guarantee that the benefit of this would have gone to the producers unless there had been a political consensus that previous trends in the distribution of income should be reversed so as to favour the farmers. Thus, over-valuation may be a symptom rather than a cause of economic disorganization and decline of primary production.

19. But there are other cases in which the general criteria for devaluation, as given in paragraphs 14 and 15 above, are not really adequate to establish a case for devaluation. The most common of these is where balance-of-payments difficulties result from an unfavourable change in the terms of trade, due to world over-production of a country's principal export product relative to demand. While it may be true to say that a devaluation by any one country does not change the world price of its export commodity, but will stimulate its domestic production, the same difficulties are likely to be present in all other countries that are major exporters of the same commodity; and if the same criteria were applied to each, devaluation would extend to all producing countries, thereby further stimulating production which in turn would lead to a further deterioration of the terms of trade. In such cases, devaluations are likely to aggravate the producing countries' problems and the proper remedies must be sought in commodity agreements that serve to eliminate over-production and restore remunerative prices.

20. It is sometimes further suggested that if the balance-of-payments difficulties of a country are due to external causes, such as a sharp deterioration in the terms of trade due to a rise in the price of some essential imports such as oil, currency devaluation may aggravate the loss of real income by making the deterioration in the terms of trade even larger. It is, of course, sometimes unavoidable that a country should suffer a loss in real income due to an unfavourable change in the terms of trade, or the failure of its main export crop, and in such cases it might be inevitable that the real consumption of the country would have to be reduced. It would, however, be rather harsh to ask the country to endure a further loss in the effort to restore balance-of-payments equilibrium through devaluation. There are limits to the decline in real income that should be expected of a country seeking to restore external balance. Declines in real wages of the order of 30 to

40 per cent, such as were experienced in a number of developing countries during the 1970s, were excessive, and disruptive of social order and development. A country should be entitled in such cases to explore alternative remedies to devaluation, such as the limitation of non-essential imports that might not involve the same additional loss of real income.

21. On closer inspection it appears, therefore, that the number of cases in which there is a general presumption in favour of devaluation as a remedy for a country's balance-of-payments problems is even more limited than appeared from the discussion earlier in this paper. Nevertheless, a residue will always remain. There will always be cases where the official rate of exchange has moved so far away from anything that could be called "purchasing power parity" - which, as we have seen, should be interpreted in the sense that the general level of costs in primary sectors of the economy has moved out of line with costs in other countries at the prevailing rate of exchange - that only a significant change in the exchange rate could succeed in aligning internal and external prices and restoring the profitability of staple exports. It will be found, however, that such large over-valuations usually occur only as a result of prolonged inflation, which is generally due to structural causes. Consequently, devaluation could not provide a lasting solution in those cases, since it would not deal with the underlying factors responsible for the external imbalance, namely the structural factors involved.

22. Finally, for the reasons discussed above, in the case of primary exporters and effective devaluation involves a redistribution of income of the devaluing country from urban wage earners to rural producers, since the former group is more likely to suffer, and the latter to benefit, from the resulting rise in food prices. It then generates strong pressures to re-establish the previous income distribution through a rise of urban wages, which tends to cancel the benefits of the devaluation through the consequential inflation. This possibility must always be borne in mind, however justified the exchange rate adjustment appears on paper; and it points to the fact that the basic requirement is political and social reform, involving the creation of a consensus on income distribution. This would prevent the kind of situation arising in which a country's export capacity is impaired by the unduly low share of income accruing to those whose efforts are critical in the maintenance of external balance.

FOOTNOTES

1. Cf. Nicholas Kaldor "The Effect of Devaluations on Trade in Manufactures", in Further Essays on Applied Economics, Duckworth, 1978, pp. 107 to 112.
2. United Nations Economic Commission for Latin America, Economic Survey of Latin America, 1976 (United Nations publication, Sales No. E.78.II.G.1).
3. Ibid. p. 445
4. Something on these lines occurred in Chile after 1974.
5. For most countries, the textile industry was the first industry selected, in view of the existence of a large domestic market, the use of unskilled labour, etc.
6. As measured, for example, by the percentage excess of the internal 'free price' of a commodity (or its nearest equivalent) over the c.i.f. landed price (calculated in local currency). At one stage in Argentina, for example, the second-hand price of a one-year-old American automobile was more than ten times the c.i.f. import price of a new automobile of the same description. This, of course, is a far greater difference than could be justified by 'protective' reasons - i.e. by the difference in the cost of production of a similar or identical motor car in the two countries, measured in the same currency. It will readily be seen that the severity of the constraint will depend on internal monetary and fiscal policies, which may have a decisive influence on the internal 'free price'.
7. For further details, see Nicholas Kaldor, "Dual Exchange Rates and Economic Development", Economic Bulletin for Latin America, September 1964, reprinted in Essays on Economic Policy, Vol. II, pp. 178-199.
8. From an administrative point of view the imposition of import duties and equivalent export subsidies, payable in local currency at the point of export, may be more efficient than the alternative method via multiple exchange rates.
9. The fall in production in some countries (such as the cocoa output of Ghana) has been explained on such grounds. It is not certain, however, whether the apparent reduction of output was a consequence of a reduction in pickings or whether it was due to an increase in smuggling into neighbouring countries where a better real price could be obtained.
10. "The Fund and adjustment policies in Africa", Finance and Development, September 1981, pp. 20-24.

ANNEX

Devaluation Policies

1. The problem which confronts governments contemplating devaluation as a remedy to their financial and balance-of-payments problems is to establish

(a) how great the over-valuation of their currency is - in other words, how far the existing rate deviates from an appropriate or "equilibrium" rate of exchange; and

(b) how to proceed in effecting the required adjustment.

The orthodox doctrine (as put forward by Gustav Cassell, among others) is that the "equilibrium" exchange rate is one which secures "purchasing power parity" - i.e. the exchange rate which makes the price level of a particular country identical with the world price level. In subsequent discussions this criterion has been shown to be a pretty meaningless one. This was partly because the prices of identical commodities sold under conditions of competition tend to be the same in different countries (ignoring differences due to taxes, import duties or transport costs), whatever the exchange-rate relationship; what differs, under these conditions, is not the prices of commodities, but the relationship of prices to domestic costs of production.

2. If the doctrine is re-interpreted so as to refer to the relationship of costs rather than prices - and as to "costs" the only relevant element relates to the value added by domestic operations, excluding the element of imports in total costs - there is the greater problem of how to measure "equivalence" then the relative costs of different commodities and services differ markedly as between one country and another. If, say, the ratio of the cost of a unit of A (a manufactured commodity) to the cost of a unit of B (a raw material) is five times higher in country X than the corresponding ratio in country Y, and the weight of the two commodities in the total output of each country is also very different, there is no unique way of deciding how the level of costs in general in the two countries are related to each other in terms of a common currency. There is no particular virtue in comparing averages of the two countries; nor is there any reason to suppose that such a "parity" rate is one at which the balance of payments on current account will also be in equilibrium.

3. A third method would confine the comparison of costs per unit in terms of a common currency to a particular range of commodities which are actually exported or are regarded as suitable for exports. But this is also a question-begging procedure, for the commodities in which a country's comparative advantage is large would naturally have much lower costs than others; and choosing a parity rate in terms of these commodities would imply imposing a large handicap on infant industries which are in competition with imported goods.

4. The alternative to this method, which would aim at equalizing costs in terms of import-competing products (i.e. in the case of developing countries, costs per unit of manufactured goods) would mean that the prices of primary products would become much higher, thereby swelling the profits of primary producers and reducing the real incomes of the local consumers of such products (i.e. reducing real wages).

5. As indicated above, the high relative costs of manufactures in the early stages of industrialization make it inappropriate that a country should adopt either a free trade system or a uniform exchange rate. This problem is best dealt with either by tariffs and subsidies (or its equivalent in terms of a dual exchange rate). The question of the exchange rate is therefore meaningful only in relation to the costs of primary products; and, here again, there may be a whole zone of rates (rather than a single rate) which are equally satisfactory from the point of view of the balance of payments. It is only when the exchange rate becomes so over-valued that the customary standard of living of workers in the primary sectors is unduly depressed in relation to that of the other sectors of the population (or in relation to their own previous living standards), with unfavourable effects on the production or export crops, that an adjustment is called for. Whether this adjustment should be of a drastic once-and-for-all kind or whether it should be undertaken in stages will depend on how far the accompanying fiscal and monetary measures necessary to secure the required changes in internal price relationships are politically feasible. If they are not feasible, it might be best to lower one's sights and go part of the way at first, rather than the whole way, and to repeat the operation (in one further step or, if necessary, in several stages) at some suitable but unpredictable occasion in the future.

6. The above note is only intended to provide general guidelines; each country's exchange-rate and foreign-trade situation has peculiarities which need detailed examination before concrete recommendations can be made in any particular case.

SELECTED MEASURES OF FINANCIAL CO-OPERATION
AMONG DEVELOPING COUNTRIES

Kalyan Vaidya*

Chapter I

INTRODUCTION

1. The Final Report of the High-Level Conference of the Group of 77 on Economic Co-operation among Developing Countries (ECDC) held at Caracas in May 1981 is a comprehensive document (from which extracts are given in Annex I), containing numerous recommendations and proposals for such co-operation. The section of that report dealing with finance puts forward many ideas, recommendations and proposals for action which are as remarkable for their wide range as for their imaginativeness. There are over twenty such recommendations in the section, some of which relate to on-going research projects. They range from those which advocate changes in existing policies or institutions, both national and international, to those which formulate new policies or propose the setting-up of new institutions. ECDC being a relatively new forum of international co-operation, there are several proposals for new institutions or policies. As is often the case with a new field, however, if the opportunities are many, so are the difficulties and challenges to be overcome.

2. Evidently it is not to be expected that all the recommendations and proposals can be acted upon immediately or even in the short run. Many would need considerable further study before being translated into concrete proposals for action. There are others on which action could, perhaps, be initiated in the not too distant future, although the results would show only in the long run. An example of the first kind is the recommendation for an examination of "the feasibility of a financing facility to meet the balance-of-payments problems, with contributions from interested developing countries and administered by them" (paragraph 62(b) of the report). An example of the second kind is the recommendation for developing countries to "increase their participation in the purchase of financial instruments issued by national governments, central banks, public and private companies of other developing countries in the international capital market, on the basis of commercial practices" (paragraph 66(e) of the report). There are, however, a few recommendations in the report which can be acted upon and also yield practical results in the relatively near future. Three of these have been selected for detailed consideration in this document. They are concerned with trade development banks, with the

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working of regional development banks and with international competitive bidding for development projects.

3. The relevant passages in the report are the following:

(i) "Special attention should be given to the setting-up of regional and interregional trade development banks as well as to strengthening existing regional ones, broadening the fields of operation and encouraging the participation of all countries concerned within the region. The Conference recommended that work on the establishment of an Export Credit Guarantee Facility should continue within UNCTAD" (paragraph 66(b));

(ii) "... developing countries concerned should seek increases in the capital of existing regional and subregional development banks comprising industrialized and developing countries. In this context, they should increase their share in such capital and so increase their participation in the decision-making processes of these financial institutions. Membership in these banks should be enlarged to include all interested developing countries of the region as well as other developing countries wishing to be contributors, and the structures and lending programmes should more closely respond to the real needs of the developing countries, including, inter alia, their need for financing of pre-investment projects. Furthermore, developing countries should support, within these regional and subregional development financing institutions, the establishment of facilities designed to undertake equity investment and promote co-financing of equity investment, in particular, from other developing countries" (paragraph 64);

(iii) "In international competitive bidding ... for development projects to be executed in their territories or financed by them, developing countries should take appropriate measures to eliminate the disadvantages faced by bidders from developing countries vis-à-vis those from the developed countries. These measures should include, inter alia, the provision of information on the conditions of bidding on a timely and prompt basis, as well as special treatment consistent with national practice" (paragraph 71); "... preferential treatment should also be extended to suppliers from developing countries in the context of government procurement, taking into account cost, quality and the time factor" (paragraph 72).

4. These topics are treated separately in the three chapters which follow and the paper ends with a summary and conclusions. The broad structure of the treatment is as follows:

(a) Introduction;

(b) The objectives set out in, or derived from, the report of the Caracas Conference;

(c) The current position;

(d) Major issues and constraints;

(e) Some possible options.

5. Owing to a severe time constraint and the need to cover three different, virtually unrelated subjects, this exercise has necessarily to be a preliminary and makes no pretension to finality. Under trade financing, the focus is on an examination of the case for setting-up regional export credit guarantee institutions for developing countries on the lines proposed by the UNCTAD secretariat and the Banco Latinoamericano de Exportaciones S.A. (BLADEX). Under regional development banks, attention is concentrated on the two major existing institutions, namely the Asian Development Bank (ADB) and the Inter-American Development Bank (IDB), to the exclusion of the other regional and all subregional development banks. Under international competitive bidding (ICB) it has not been possible to do more than scratch the surface of the problem, in view of the absence, in particular, of any substantial previous empirical research on the subject.

Chapter II

TRADE FINANCING, WITH SPECIAL REFERENCE TO REGIONAL AND INTERREGIONAL TRADE DEVELOPMENT BANKS

Introduction

6. If the annual growth target for the 1980s of 7 per cent for developing countries as a group, adopted by the United Nations in the International Development Strategy, is to be even remotely approached by 1990, the annual growth rate of the exports of manufactures would have to rise from the 1970-1980 average of 9.9 per cent to 13.6 per cent during 1980-1990. ^{1/} Given the expected environment of inflation, recession and protectionism in developed countries, the languishing flows of official development assistance (ODA) and the prohibitively high levels of interest rates on most borrowed capital, this certainly is a tall order. Granted that the contribution of manufacturing to gross domestic product (GDP) in developing countries is estimated to have risen from 13.4 per cent in 1960 to 19.7 per cent by 1980 and is projected to rise to 22.7 per cent by 1990, lack of production may not be a major constraint. With depressed economic conditions and the rise of strong protectionism in their wake in developed countries, however, selling this output of manufactures abroad may be a difficult problem for developing countries. Strict adherence to the highest standards of quality, use of modern marketing techniques, after-sales service, competitive pricing and the extension of adequate credit on competitive terms to the importer will all be necessary, if they are to achieve their export targets. In recent years, much progress has been made - at least by the leading manufacturing developing countries - in employing these tools, except perhaps the last one, export credit. Several developing countries, especially those exporting manufactures in significant volume, have already created national institutions for extending export credits. However, while it is within the capabilities

of the governments of most developing countries to arrange payments in local currency to a domestic exporter on behalf of the foreign importer, it is not easy for them to have to wait for the payment in foreign currency by the latter. Their ability to extend foreign-exchange credit to the foreign importer is severely limited when they are themselves net importers of capital and suffer from a chronic foreign-exchange constraint.

7. There are, of course, some ways of overcoming this problem which developing countries have not yet fully explored. One of them is to engage in barter trade, now called counter-trade. In ancient times, before the emergence of the exchange economy, barter trade was common among nations. Even at present a great deal of the trade of the socialist countries of Eastern Europe with market-economy developing countries is conducted on the basis of barter. This method partly resolves the problem of deferred foreign-exchange receipts by settling payments in goods and/or services. It raises other questions in the process, however: the need for a near-perfect matching of the goods and/or services traded between the two parties; an implied fixed exchange rate over time, in a period of unstable exchange rates; implied fixed prices for each of the products, over a lengthy period during which their market prices would probably change; and an implied fixed rate of interest, in a period of unstable interest rates. Nonetheless, in the face of the problems described above, the acute shortages of external finance suffered recently by developing countries have prompted resort to counter-trade to a growing extent. While counter-trade cannot be considered to provide a complete solution to the foreign-exchange difficulties of developing countries, the full potential of this technique is clearly far from realized. Developing countries should certainly explore this avenue further, at least as a partial solution to their problems, particularly in the context of industrial co-operation among themselves.

8. Another, somewhat related technique would be to set up clearing and payments arrangements among developing countries. Both these types of arrangements would also help in minimizing the need for foreign exchange or, what amounts to the same thing, maximize international trade with a given amount of foreign exchange. Many such arrangements, ranging from simple bilateral to complex multilateral ones, varying in sophistication, exist in different parts of the developing world. Their contribution is difficult to assess, however, since most of them are as yet at a rudimentary stage. The question of clearing and payments arrangements as a means of providing financing mechanisms for the trade of countries short of foreign exchange certainly has to be mentioned here in a discussion of trade financing, but it is too important and too complex to be dealt with en passant.

9. It is customarily argued that while exports of developed countries enjoy the normal short-term trade credit facilities provided by the national export credit or export financing institutions such as the Export Credit Guarantee Department in the United Kingdom or the Eximbank in the United States, exports of developing countries have limited or no access to such facilities. In fact, developing country exporters do not

often have to extend credit to buyers from developed countries, as the latter are usually able to arrange their own financing with their own banks. In other words, this problem is much more characteristic of the trade of developing countries, inter se, where the lack of credit facilities becomes a constraint at both ends, than of their overall exports.

10. With the growth of investment by transnational corporations in developing countries, a certain proportion of the exports and imports of developing countries forms part of intra-firm transactions. Typically, exports of raw materials, spares, components and semi-manufactures from developing countries and imports of capital goods, plant and equipment into those countries fall into this category. In the latter case (a sale by the parent company to its subsidiary) export credit is very likely to be provided. In any event, all these transactions get hidden away in intra-firm accounts and do not perceptibly undermine the country's foreign-exchange position, except when there are fraudulent business practices.

11. The main financing instruments used in developing countries are bills of exchange, letters of credit and bills for collection. Bankers' acceptances, which are a fairly common instrument of financing trade among developed countries, have not yet become as important an instrument in the trade of developing countries. The paucity of such advanced credit instruments or bills in the latter case is the result of such factors as the relatively underdeveloped state of the banking and financial institutions; the absence in many countries of any institutional mechanism for guaranteeing against the risks of non-payment; the absence of a large enough secondary market (or even any such market) for discounting or selling the negotiable bills; and, last but not least, often the weak balance-of-payments position of the developing country involved, which aggravates the attendant risks.

The objectives derived from the report of the Caracas Conference

12. The objectives are:

- (a) To set up regional and interregional trade development banks and to strengthen existing ones;
- (b) To broaden the scope of their operations;
- (c) To encourage the participation in such banks of all countries concerned within the region;
- (d) To continue the work in UNCTAD on an Export Credit Guarantee Facility; and
- (e) Generally to strengthen the financial framework of institutions, instruments and policies underpinning the trade of developing countries.

The current position

Counter-trade

13. While, essentially, counter-trade is a new rubric for barter, in its wider connotation it can also mean compensation deals involving the exchange of goods against other goods or even services. In recent years, not only developing countries and members of the Council for Mutual Economic Assistance (CMEA) have engaged in counter-trading; even large United States transnational corporations such as General Motors, McDonnell Douglas and General Electric have concluded counter-trade deals with some market-economy and planned-economy developing countries. The Occidental Petroleum Corporation's 20-year agreement with the USSR for the supply of \$20 billion worth of superphosphoric acid to the USSR against imports of ammonia, urea and potash is probably the largest counter-trade deal yet. United States banks have also begun to be interested in counter-trading, though the Glass-Steagall Act of 1933 prohibits them from active participation. A trend discernible recently in the counter-trade deals, which are concluded almost invariably with countries suffering from foreign-exchange stringency, is the exchange of high technology and sometimes even turn-key contracts for imports of raw materials or of the products produced by the factories set up under such deals. Moreover, the counter-trade does not always stipulate the import of such raw materials, etc., by the partner country: they are sometimes shipped for export to third countries. There are cases where the cost of setting-up a whole factory is recovered over a number of years through agreed imports of raw materials (e.g. tin, rice, cocoa, etc.).

Trade development banks

14. The concept of a trade development bank (TDB) is a very interesting one. However, there is currently no known regional or interregional TDB in existence. A rapid survey of the field shows that the nearest approximation to what may be called a TDB is BLADEX, which is a regional institution created by Latin American countries (see Annex II for a brief description of the objectives, functions, structure, organization, etc. of BLADEX). Discussion of TDBs in this paper centres around the possibilities of strengthening BLADEX and the case for replicating it in the other developing regions.

Export credit guarantee facilities

15. Most developing countries which are sizeable exporters of manufactured goods already have in place at least some national arrangement for export credit financing. Apart from BLADEX, 2/ there are four regional institutions in developing countries which provide refinancing and guarantee facilities in support of the exports of member countries: the Andean Development Corporation, the Inter-American Development Bank, the Inter-Arab Investment Guarantee Corporation and the Islamic Development Bank. Elsewhere, even a fairly well-established and reasonably successful economic grouping such as the Association of

South East Asian Nations (ASEAN) is not yet persuaded that it needs a regional institution of this type. A fact-finding mission of the International Finance Corporation (IFC) which visited the ASEAN countries early in 1980 came to the conclusion that (a) the existing short-term export credit facilities in the region appeared to be adequate; and (b) whether because of the dominance of primary commodities and light manufactures in the exports of the member countries or because of the uncompetitive prices of their exports of other manufactures, demand for medium- and long-term export credit in these countries was not strong enough to justify establishing a regional facility for export credit guarantees. Some of the larger developing countries, such as India, not only possess export credit guarantee institutions but are now setting up more multi-purpose ambitious institutions modelled on the Export-Import Bank of the United States (in this example, the Export-Import Bank of India).

16. There does not exist, at the interregional level, a mechanism for facilitating the financing of developing countries' exports. In this connexion, mention must be made of the work undertaken by UNCTAD on the proposal to set up an international export credit guarantee facility (IECGF), which would facilitate the discounting of developing countries' export credit documents on international capital markets. The UNCTAD proposal envisages the establishment of an adequately funded, multilateral financial institution whose main objective would be to guarantee export credit paper, that is, promissory notes, bills and similar negotiable instruments of payment arising from exports on credit by developing countries, so as to improve the marketability of such paper on international capital markets. The guarantee, which would be provided for a small consideration, would be extended in accordance with the procedure described below. The holder of the export credit paper would present it to a national agency - a central bank or similar institution designated to extend guarantees to national exporters. This agency, upon extending its own guarantee to an eligible trade document, would present it to the international facility, on the strength of whose further guarantee the national agency, the exporter or the exporter's bank in the exporting country would then rediscount its guaranteed paper on favourable terms on international capital markets. The mechanism of operations through national agencies implies a counterpart guarantee towards the international facility by the national agencies. The guarantee of the facility would represent its unconditional promise to pay the holders of the export paper upon default by the drawee. The UNCTAD proposal envisages that both buyer and supplier credits be eligible for guarantee. The export credit paper arising from exports of member developing countries should, in order to be eligible for guarantee, satisfy rules of origin established by the international facility with regard to categories of goods which are normally sold on medium- and long-term credits (see Annex III for a fuller description of IECGF).

17. UNCTAD also has under consideration a complementary scheme for direct financing of exports. Under this scheme IECGF would also purchase export paper as BLADDEX does, and either maintain its positions until maturity (thus performing a banking service) or sell part or all of its positions in the secondary market (thus performing a brokering

service). In the latter cases its success would depend critically on its appending its guarantee to the export paper.

18. Finally, it should be emphasized that most developing countries do not have easy access to international facilities for insurance against the risks of export credits. In the UNCTAD proposal for IECGF, if the primary onus of unconditional payment is on IECGF, in the event of default by the importer, the ultimate recourse is to the exporting country's Government. If a risk insurance facility is in place, it can take over this burden from the latter.

Major issues and constraints

19. The main advantages of counter-trade are: overcoming the foreign-exchange bottleneck through increased exports and acquiring technology and marketing services for export promotion. The problems which may be encountered are: the difficulties of matching the packages of goods and services on both sides; the implied fixed pricing, fixed exchange rates and fixed interest rates over time; and the essentially bilateral character of such deals. When technology is part of a package, its pricing tends to be arbitrary and controversial, even when accounted in money terms; it becomes even more so when accounted in terms of goods and/or services. To sum up, for countries at the end of their foreign-exchange tether, counter-trade no doubt offers relief and a way out of a cul-de-sac. Moreover, while its potential appears to be limited, it is far from being realized so far. It is valuable in the context of industrial co-operation.

20. BLADEX is about the only example of a functioning regional institution embodying the TDB concept recommended by the Caracas Conference. BLADEX is more limited in conception and scope than an Export-Import Bank. After three years of operations, its progress is considered to be quite satisfactory and, while its net contribution to the exports of Latin American countries is difficult to estimate, it has unquestionably reduced the time-lag between the accrual and receipt of foreign-exchange earnings which characterizes export transactions on credit.

21. BLADEX essentially performs four distinct, though related, services:

- (a) banking: it discounts export bills and holds them until maturity;
- (b) merchanting: it buys and sells export paper of various kinds;^{3/}
- (c) brokering: it brings together buyers and sellers for different kinds and values of export paper; and
- (d) guaranteeing: it issues its own guarantees to make export bills marketable on the international capital markets.

It is a pioneering experiment and, as such, has to weather all the storms and difficulties that a pioneer faces. Some of its main handicaps are: the absence of risk insurance cover, which means that the ultimate financial liability remains with the exporter's Government; lack of a large enough secondary market, which hampers the sale of its export bills; lack of a sufficiently developed market in bankers' acceptances; and lack of sufficiently large institutional investors, such as insurance companies and pension funds, in search of long-term investment opportunities.

22. A few of the operational practices of BLADEX seem capable of immediate improvement: (a) its preference for the method of direct financing - i.e., for buying export bills rather than issuing its guarantees, for a small fee; (b) its involvement (at least, initially) with conventional or short-term export financing; and (c) the restriction of its credit facilities to terms not exceeding five years. As for (a), having regard to the limited resources of BLADEX in relation to a very large, unsatisfied demand, an alternative approach would avoid the purchase of export bills in order to conserve resources for performing its primary obligator function in the event of default. Its guarantees would in any case open the doors of the vast international capital market to financing Latin American exporters. The justification given for the direct financing method is apparently twofold: that it will enable BLADEX, in its early years, to establish its presence in the international capital market; and that it will enable BLADEX to know the commercial banks of the region well, because they will bring the bills to BLADEX for rediscounting. As for (b), in the initial years, the bulk of BLADEX's business has probably consisted of conventional export bills (maturing within 180 days), and the balance of non-conventional ones (with longer maturities, up to five years), and other similar commercial paper. Since commercial banks are believed to be already handling conventional export financing business fairly adequately and efficiently, the question arises whether the contribution of BLADEX is a net addition or whether it is simply an alternative to commercial bank financing. There is also the question of whether BLADEX resources might be better employed in financing medium- to long-term export bills. Here, again, the apparent justification is twofold: that it enables BLADEX to get to know the commercial banks better and that it should bide its time until it has an acceptable image on the international capital market. As for (c), it would, indeed, probably be much more appropriate for BLADEX to engage in financing credits for terms longer than five years instead of getting involved in conventional financing, since its main purpose is to encourage non-traditional exports on credit.

23. The national export credit guarantee or export finance schemes which exist in several industrialized developing countries help the promotion of exports significantly, by making payment "on the nail" to the exporter directly or by enabling him to obtain payment from a local bank and extending credit to the foreign importer. However, this does not resolve the problem of the country having to wait for receipt of the foreign-exchange proceeds of the sale until the importer is able to make the payment. This is almost always too difficult a problem for most developing countries to solve. It is here that an international -

either subregional, regional or interregional - export credit guarantee system can fill a real felt need. In other words, while national schemes are useful, what is really necessary to get to the heart of the matter is a package of national and regional, or preferably international, export credit guarantee schemes.

24. This is the rationale behind the work of the UNCTAD secretariat on the proposal to set up an IECGF. Before raising any questions about the scheme proposed, it is necessary to ask whether the absence of such a scheme is hampering developing countries' exports and whether its existence would increase them.

25. No amount of statistical data can fully and conclusively answer these questions. Even without an IECGF, South-East Asian exports have been booming for several years because of the reputation which the countries concerned have established for quality and highly competitive pricing. If they received the additional help of an IECGF, that would be so much more grist to their mill. On the other hand, in Africa, there appears to be an insufficient production base at present for exports of manufactures to be able to take advantage of (or, conversely, to suffer from the absence of) such a facility. ^{4/} Potentially, of course, all developing countries would stand to gain from such a facility. The experiment of BLADDEX is too new to draw any firm conclusions from it. However, its progress and general impact on Latin American exports of manufactures are believed to be satisfactory.

26. It is perhaps worth reiterating the point made earlier in this paper that while IECGF may encourage to some extent the exports of manufactures from developing to developed countries, its impact on their exports to other developing countries is apt to be much more significant, even dramatic. This is because both on-shore and off-shore financing is available more easily to importers from developed countries and they would seldom seek such financing from a developing country exporter. Developing countries sometimes import manufactures from developed countries, even though higher prices, because the exporters from other developing countries cannot extend credit to them. An IECGF would be a major attraction to these importers.

27. In theory, one can challenge the logic of restricting export credit guarantees to capital goods exports, on the ground that even if an individual importer of, say, food or raw materials, is ready to make full payment on delivery of the goods, if his country's currency is not readily convertible and the country's payments position is adverse, his Government may need credit. In practice, owing to the likely initial scarcity of resources for the IECGF, it would be prudent for it to restrict export credit to those goods which need it most, namely, capital goods. However, if the importing country has a balance-of-payments problem, logically, it should seek assistance from an institution such as the International Monetary Fund (IMF) or some bilateral balance-of-payments support.

28. One final comment on this subject should be made here. The task of an IECGF in issuing guarantees would be made much lighter if risk insurance cover of some kind is obtainable. In the event of default by an importer, the IECGF would indeed, as the primary obligator, have to make unconditional payment to the holder of the guarantee, but the next (and ultimate) recourse would be to the insurance agency rather than to the exporter's Government.

29. In considering an institutional solution on the lines of a TDB or an IECGF to the problem of trade financing, one must also bear in mind certain preconditions, which have to be satisfied by developing countries, such as the production of the appropriate goods on an adequate scale, the attainment and maintenance of the necessary standards of quality, competitive pricing and the provision of adequate publicity and marketing and of after-sales service facilities. Unless these preconditions are satisfied, export credit guarantee and other facilities will hardly be of any use.

Some possible options

30. Since BLADEX is conceptually the closest among existing institutions to a TDB, strengthening it and replicating it in other developing regions are two ways of achieving the objectives of the Caracas Conference.

31. The following steps would appear to be necessary, by way of strengthening BLADEX:

- (a) Phasing out direct financing, i.e., the purchase of export bills and moving progressively into guaranteeing;
- (b) Phasing out more rapidly than at present of conventional export bills (those maturing within 180 days) and moving progressively into non-conventional ones (maturities of 180 days to five years);
- (c) Guaranteeing of export bills of longer maturities than five years at discretion, possibly by extending the five-year guarantee from time to time. For example, a bill drawn for 10 years in 1982 could be guaranteed by BLADEX up to 1987. In 1986, a new guarantee covering five years might be issued and in 1981 another guarantee for one year, thus covering the period up to the redemption date in 1992;
- (d) Setting-up an institution arrangement for taking over the risk insurance part of BLADEX's business. It should be added here that, even at present, BLADEX has recourse to the exporter's Government, which therefore bears the ultimate risk. It follows that BLADEX's guarantee is absolute and unconditional and the marketability of its paper is first class. However, since in the event of default the loss has to be borne by the exporter's Government, the latter may have just a little

hesitation in seeking to purchase BLADDEX's guarantees, at any rate, in the early years. This hesitation would be entirely removed if, for a small additional charge, the risk could be covered by an insurance institution.

32. As for setting up similar institutions in other regions, it has been pointed out that it is probably too early to make such a move in Africa, while opinion in the ASEAN region is not strongly in its favour at the present time. It seems more than likely, however, that as various Asian economies mature industrially, start to produce capital goods, look for export outlets for them and become able to match formidable competitors like Japan and the Federal Republic of Germany on quality and price, they will begin to be cramped by the limitations of their national export credit guarantee schemes. This scenario does not, by any means, belong to the distant future. If depressed demand conditions continue to prevail in the developed countries for the next few years, as seems most likely, the scramble and the competition in the capital goods markets of developing countries are bound to become severe. Given the perennial foreign-exchange difficulties of developing countries, the offer of export credit facilities would certainly become a very important strategic tool. The question of setting up a regional institution in Asia, as typified either by BLADDEX or by the proposed IECGF of UNCTAD, will have to be faced fairly soon.

33. As for extending the merchandise coverage of these institutions to include, say, exports of food and raw materials, this would appear to be a premature step at this stage. Institutions of this type have yet to come into their own in some regions and into existence, even, in others. The need to conserve and allocate their scarce resources to the highest priority uses (see paragraph 27 above), is a further argument against such a step.

34. The question of expanding the developing country membership of these types of institutions has to be treated separately for each region. In Latin America, all the countries are already members of BLADDEX; in Africa and Asia, no such institutions have come into being so far and the question does not yet arise.

35. However, if an IECGF, as proposed by the UNCTAD secretariat, is set up to cater for all developing countries, regional ECGFs may not be necessary. Since it has been proposed that developed countries members of the Organization of Petroleum Exporting Countries, and relevant international organizations - with, it is hoped, the World Bank playing the lead role - will participating in the IECGF, the problems of adequate capital resources and capital market rating for its guarantees would be resolved from the outset in the case of IECGF.

Chapter III

REGIONAL DEVELOPMENT BANKS

Introduction

36. Aside from the World Bank, the regional development banks, especially the IDB and the ADB, have been the principal multilateral sources of long-term development finance to developing countries. The African Development Bank and the Arab Bank for Economic Development in Africa are relatively new and smaller institutions and have not been examined in this paper at all. Their inclusion in this paper as a topic of discussion is justified not only by the attention which they are given in the report of the Caracas Conference, but also on the ground that they have a South-South as well as a North-South dimension to their structures, financing and operations. It is the former dimension on which this paper is primarily focussed.

37. Estimates of the combined current-account deficit of the non-oil exporting developing countries for the decade of the 1980s, which would give a rough measure of the long-term capital requirements of these developing countries are by no means easy to make in the present uncertain world situation. It is no wonder, then, that the World Bank's estimates range from as low as \$ 58 billion in 1985 (the Low Case) to \$ 116.5 billion in 1990 (in the High Case) ^{5/} and that the medium-term projections of the IMF place it at \$ 140 billion in 1985. ^{6/} A precise estimate is not necessary for this exercise, however. It is enough to bear in mind that the long-term capital needs of the developing countries of Asia and Latin America together are likely to be a few hundred billion dollars during the 1980s decade. It is against this canvas that the past and potential future contributions of ADB and IDB have to be viewed and examined.

38. The combined subscribed ordinary capital of the latter two banks at the end of 1980 was about \$ 33 billion. The combined capitalization may be expected to reach between \$ 106 billion and \$ 024 billion by 1990, 75 to 80 per cent of which would be attributable to IDB.

39. Since the gearing ratios are still very conservative in both banks and loan disbursements are a small fraction of these resources - disbursements net of repayments being an even smaller fraction - it is hardly necessary to labour the point that the total net contribution of these banks to the resource requirements of the non-oil producing developing countries is not likely to be significant unless further steps are taken. Hence, the need to expand their resources, both capital and borrowed.

40. In the ADB, the developed countries within and external to the region, taken together, hold a majority of the votes. In the IDB, the regional developing countries already have a majority. However, in many respects, there is a tendency on the part of both banks (and especially

the ADB) to follow the World Bank's example. The result is excessive conservatism of outlook (as distinguished from financial prudence) in their policies.

41. There are soft-loan "windows" in both banks - the Asian Development Fund in ADB and the Fund for Special Operations in IDB - though the amounts at their disposal are relatively small. The extent to which the terms of each loan can be tailored to suit the borrowing member's economic circumstances and prospects, by blending the soft funds with the regular loans is, therefore, narrowly circumscribed.

42. Finally, the non-project lending activity of these banks is statutorily restricted to small amounts, though it is clear that developing countries are feeling increasingly in recent years the need for long-term non-project assistance. With even greater stringency of foreign exchange looming large over the horizon of the 1980s, this need is likely to be only more intense.

43. To sum up: although the regional development banks are not afflicted by the Bretton Woods formula of weighted voting patterns, (a) they were cast in the image of the World Bank and (b) developed countries have a majority of votes in the ADB, while the influence of the United States remains strong in the IDB. Consequently, the lending policies of these banks still primarily reflect the objectives, the principles and the development model of the developed rather than the developing countries.

The objectives set out in, or derived from, the
report of the Caracas Conference

44. The objectives are:

- (a) To increase the capital resources of the regional development banks;
- (b) To increase the share of developing countries in the capital of these banks;
- (c) To increase the participation of developing countries in their decision-making processes;
- (d) To enlarge their membership so as to include all interested developing countries in their respective regions and any other developing countries wishing to contribute to their resources;
- (e) To make their structures and lending programmes respond more closely to the real needs of developing countries, including their need to finance pre-investment projects;
- (f) To establish within these banks facilities to undertake equity investments; and

- (g) To promote co-financing of equity investments, in particular by attracting capital from other developing countries.

The current position

45. The IDB is much the older and larger of the two banks considered in this chapter. Even so, by the end of 1980 its ordinary subscribed capital amounted to no more than \$ 24 billion. That of the ADB, at the same time, was a little under \$ 8.8 billion. Commitments already entered into are expected to increase the ordinary subscribed capital of the IDB by \$ 4.5 billion by the end of 1982. It is forecast that in the Sixth Replenishment, the capital of this bank will increase by 12 to 15 per cent per annum. For the Third General Capital Increase of the ADB the staff has proposed an increase of 125 per cent.

46. Only a part of the subscribed capital is paid up. The balance is callable and represents a guarantee or security against which these banks borrow sizeable sums in the international capital market. The gearing ratio (capital:lending) is the key determinant of how much they can borrow against subscribed capital. In the ADB, the ratio is maintained at a conservative 1:1. In the IDB, not only is the gearing ratio conservative but only the 56 per cent of subscribed capital which is contributed by countries with freely convertible currencies (the United States, Canada, countries of Western Europe and Venezuela) is included in calculating the ratio.

47. Membership by the developing countries in the region is complete in the case of each of these regional development banks.

48. As stated in paragraph 40 above, developed countries hold a majority of votes in the ADB. Japan, Australia and New Zealand within the region and others external to the region together control 57 per cent of the votes, a proportion pro rata to their capital contributions. In the IDB, the regional members all of which are developing countries, hold 55.3 per cent of the capital stock and votes. The United States has the largest single vote, 34.6 per cent; Canada has 4.6 per cent and the remaining members external to the region - all, except Yugoslavia, developed countries - together hold the balance of 5.6 per cent. Despite the theoretical voting arithmetic, it is clearly well-nigh impossible in practice for the IDB to take any important decision without the consent, explicit or implicit, of the United States, the largest single voter and contributor.

49. The possibility of increasing the share of developing countries in the capital resources of these banks is subject to statutory provisions. To increase the share in the subscribed capital stock of the ADB requires a decision of the Board of Governors taken by a majority of at least two-thirds of its members, representing not less than three quarters of the voting power. A further binding provision reserves at least 60 per cent of the capital contributions (and votes) for the

members of the region - developed and developing countries taken together. It would always be permissible to increase the borrowing from developing countries, which is now, in contrast to the past, economically feasible. This would confer no greater voting (and decision-making) power, however, upon developing countries.

50. The provisions for increasing the authorized and subscribed capital of the IDB are identical to those of the ADB. The relative shares of the members in any capital increment are the same as those in the previously authorized capital.

51. All sovereign, independent developing countries in the region are already members of the relevant bank. Whenever a country becomes independent, it can initiate action to become a member. Countries external to the region can become members and make contributions, but are not entitled to receive any loans, grants, technical assistance, etc.

52. The objectives and principles of both banks do emphasize dedication to the development of developing countries but (a) their Articles of Agreement, modelled on those of the World Bank, and (b) the predominance of developed countries in their decision-making apparatuses make it a little difficult for them to reflect fully the desires of developing countries in their lending policies. Nevertheless, the direct loans of the IDB for pre-investment, the ADB loans for socio-economic infrastructure and the ADB loans to development finance institutions are evidence that a good deal of pre-investment financing is undertaken. This activity is crucial to the programmes for the least developed countries in the banks' membership.

53. Neither the ADB nor the IDB undertakes equity investment, alone or jointly with other investors. They co-finance a considerable volume of loans. An example of the catalytic role played by the ADB is that "Every dollar lent by the Bank is matched with an investment of about \$ 1.5 by the borrowing countries and, in certain cases, by outside co-financing." ^{1/}

Major issues and constraints

Raising capital resources

54. As pointed out above, the ADB is expecting a 100 to 125 per cent increase in capital at the next General Capital Increase and the IDB is expecting a 12 to 15 per cent increase per annum in the Sixth Replenishment. There seems to be no serious problem, therefore, in raising capital.

The gearing ratio

55. As already explained, gearing ratios are conservative in both

cases. There seems to be some dissatisfaction among the developing country members with this state of affairs. The developed country members are opposed to an increase at the IDB (for example, by permitting borrowing to equal the total subscribed capital instead of that subscribed by the developed country members and Venezuela, as is the case at present) which would compromise that bank's credibility on the international financial markets. They argue that the holders and prospective buyers of IDB bonds may not regard subscriptions by developing countries (other than Venezuela) as adequate or sound guarantees for their loans to the IDB. This matter was due to be discussed at the Lisbon meeting of IDB in January-February 1982.

56. Whether or not the AAA rating of IDB bonds would be lost as a result of raising the gearing ratio, thereby raising the cost of borrowing by the IDB is a debatable issue.

Changing the power balance

57. With control vested in the developed countries through their voting majority, it is virtually impossible to shift the balance of power in the ADB in favour of developing countries, unless the developed countries within and external to the region, taken together, agree to dilute their control. Apart from the commonsense dictum that nobody in the world willingly abdicates power, it is perhaps a valid point, granted that even the regular capital contributions to these banks by developed countries form part of their aid budgets, to claim that their Governments have a moral duty to monitor the use of the money and hence feel the need to be able to exercise control.

58. As already noted, United States influence in the IDB remains strong, despite the fact that a majority of votes already rests in developing countries. It is unlikely that a further increase in that majority would change the situation significantly. Whether anything could be done to increase that majority at all seems doubtful, in any case in the light of section 3(a) of the Agreement Establishing the Inter-American Development Bank. 8/

Limited soft loans and grants

59. Both banks have established funds for making soft loans and grants: the Asian Development Fund (the ADF) in the ADB and the Fund for Special Operations (FSO) in the IDB. However, both these are quite small. The ADF, after the Second Replenishment (1979-82), totals \$ 2,150 million, while the resources of the FSO amounted at the end of 1980 to \$ 7,669 million. In addition, as at the end of 1980, the IDB had undertaken the administration of some 11 different Special Funds including the Venezuelan Trust Fund and the Social Progress Trust Fund, each of over \$ 500 million. Since such funds are usually dispensed as grants, or at any rate, as very long-term loans, they need perpetual replenishment if operations are to continue.

Limited variation in terms

60. The economic ability of these banks to vary terms and charge the optimal ones 9/ to each borrower is seriously circumscribed by the shortage of funds on soft terms. Optimality is achieved in practice by blending conventional loans on normal terms with aid on soft terms (for which these are also normal conditions), in various proportions. When funds usable on soft terms are too scanty, the possibility of offering a very poor country assistance entirely on soft terms is almost precluded.

Programme lending

61. Following World Bank practice, both the ADB and IDB have written project lending into their Articles of Agreement as the sheet anchor of their lending policies. The ADB - again apparently following the World Bank's example - has set a ceiling of five per cent of its anticipated annual lending (and 10 per cent of its lending to any particular country) for programme lending which the ADB may undertake in special circumstances (for example, removing the foreign exchange bottleneck for essential imports, such as spares, components and raw materials). The ADB also decided in mid-1980 to undertake sector lending in appropriate circumstances. These loans could finance the capital goods requirements of particular sectors and help development finance institutions to strengthen sector policies and institutions. They could finance, say, the expansion of networks of secondary or feeder roads, or rural water supply, power transmission and distribution facilities, including rural electrification.

62. The problem with which one is confronted here is: as developing countries advance on the development path, they increasingly feel the need for long-term balance-of-payments support rather than merely project finance. This need is intensified when there is a prolonged deterioration in the terms of trade, a general environment which is anticipated for the 1980s. The IMF does provide balance-of-payments support, but for short- to medium-term periods only. The World Bank and the regional development banks provide long-term support, but fundamentally in project terms. The World Bank has made a commendable effort over the years to break out of the straitjacket of its Articles by flexible and pragmatic interpretation of them. However, it does not go far enough.

63. It is possible for the ADB and IDB to do more than that. Amending the Articles is probably a little easier for them than for the World Bank, because of the greater voting strength of developing countries in them. Certainly, it should be even easier to frame more appropriate operational rules, setting arbitrary ceilings (as on non-project lending), if developing countries were united on this issue. However, the real issue is not the formal problems of the Articles and the rules, but how to ensure the security and timely repayment and servicing of loans.

64. When general balance-of-payments support is extended to a country, according to the IMF, fairly precise conditions have to be specified for ensuring a timely servicing and repayment of the loan; otherwise, the money could be irretrievably lost. In project lending, the World Bank has been able to monitor the end-use of its money. But has this monitoring really been responsible for the Bank's success in getting its repayments on time? This is very doubtful. A country's total foreign exchange expenditure is many times the value of a project loan from the World Bank and, however careful and efficient the project administration, if the rest of the economy is mismanaged, there will still be difficulties in servicing the World Bank loan. How, then does the Bank secure the timely repayment and servicing of its project loans? The answer probably is that the borrowing country is very concerned about meeting its World Bank obligations, in priority over any other obligations, so as to nurse and safeguard its major multilateral source of finance.

65. In the light of these considerations, there is no reason to believe that programme loans by ADB or IDB would be any less secure than project loans. Furthermore, to make them doubly secure, conditions could be agreed upon, not general, unselective conditions like those prescribed by the IMF, but selective, specific conditions which are entirely consistent with - and, indeed, supportive of - the borrowing country's developmental goals, its principles, policies and institutions and, above all, its capabilities.

Co-financing

66. The ADB's co-financing of loans (it has not so far sought the authority to co-finance equity investments) has been remarkably successful. The IDB's co-financing of loans rose in value from \$ 30 million in 1976 to a peak of \$ 133 million in 1978, declined in 1980 to \$ 50 million and is estimated to have risen to \$ 85 million in 1981. The setback after 1978 is believed to be due to certain special factors and likely to prove temporary. In co-financing with the IDB, commercial banks are generally willing to accept a lower rate of interest (Libor + 1 1/4 per cent instead of the usual Libor + 1 1/2 per cent 10/), because of the security offered by the government guarantee which accompanies IDB involvement and the project evaluation and technical supervision services which the IDB provide.

Some possible options

Enlarging the capital base of the regional development banks

67. Since both the ADB and the IDB are planning and hoping to expand their ordinary capital bases, there does not appear to be any major problem in connexion with this option.

68. In the ADB, where dilution of the control exercised by the majority vote of developed countries seems to create a problem, two possible solutions may be suggested: (a) to exert pressure on developed member countries to take their regular capital contributions to these banks out of their aid budgets and to treat them as the investment which they really represent; and (b) to make it worth the while of the capital-surplus developing countries external to the region (primarily the OPEC countries) to make larger capital contributions to the ADB (and the IDB), in order to secure a controlling voice in their policies and operations. One possibility is to guarantee a fixed and reasonably attractive rate of interest, designated and payable in SDRs.

Securing majority control for developing countries in the ADB

69. Even if the steps indicated in paragraph 68 above are taken successfully, the 60:40 distribution of capital stock between member countries within the region and external to it would remain. However, this need not be a problem if, within the latter 40 per cent share, a substantial proportion, say, three-quarters of any incremental subscription was contributed by developing countries (for example, members of OPEC).

Increased borrowing and the gearing ratios

70. Large sums are being borrowed on the international capital markets without any difficulty by both these banks, thanks to their AAA rating in these markets, and there seems to be no strong reason why the conservative 1:1 (ADB) or even lower (IDB) gearing ratios should continue to be adhered to. With expectations that highly liquid conditions will prevail in capital markets and that demand will remain generally depressed in developed countries, there is little reason to fear that a 1:2 (capital:borrowing) gearing ratio would result in a lowered rating and higher costs of borrowing. In this respect, the past borrowing record of the two banks should be at least as important as the guarantee of callable capital.

Varying the terms to suit each borrowing country

71. The idea that the terms of assistance should be tailored to suit the individual economic circumstances and prospects of each borrowing country is entirely rational. If normally there are only two or, at most, three rates of interest ruling on the market, it is strictly a matter of avoiding too much complexity and achieving convenience. Theoretically, with the help of computers and an agreed set of periodically reported socio-economic parameters, coupled with the exercise of judgment, devising appropriate terms for each country (at a point of time) should not be too difficult. The practical constraint would be the paucity of funds usable on soft terms. This can be remedied if larger amounts of such resources are placed by members at the disposal of these banks.

72. One possible expedient worth studying in this context is so to arrange the dispersion of loans around the mean rate of interest (i.e. the average rate payable to the banks' creditors) that the interest earned in excess of the mean rate on loans to the relatively better-off borrowers would at least partly offset the deficit resulting from earning interest below the mean rate on loans to the relatively worse-off borrowers.

Switching to programme lending

73. If borrowing countries look forward to maintaining a continuing relationship with these banks, even programme lending would be quite secure in terms of future servicing and repayments. It could be made doubly secure by prescribing selective, development-oriented conditionality, fully supportive of the borrowing country's development plan.

Co-financing

74. Co-financing of loans has a better chance of succeeding than is indicated by historical experience if: (a) it is tripartite - provided in equal thirds by the development bank, official sources on concessional terms and commercial banks; and (b) the government guarantee secured by the development bank covers the entire package rather than only the development bank's portion of the loan.

Chapter IV

INTERNATIONAL COMPETITIVE BIDDING AND DEVELOPING COUNTRY BIDDERS

Introduction

75. In all agreements for loans sanctioned by the World Bank, the ADB and the IDB (hereafter referred to as "the Banks"), the need to make the most efficient use of scarce resources has led to the incorporation of a clause calling for the award of tenders through international competitive bidding (ICB). Detailed guidelines for the procedures to be followed are published by the Banks for the use of the borrowing countries, whose responsibility it is, in the final analysis, to award the contracts.

76. In the early years of the World Bank, for obvious reasons, most of these awards for development projects in developing countries were won by bidders from developed countries. In those years, this was inevitable as there were hardly any bids from developing countries. More recently, a number of developing countries have acquired the necessary experience and expertise from working on development projects in their own countries and have begun to bid for tenders under ICB. Countries such as Brazil, India, the Philippines, the Republic of Korea

and Romania have begun to win some contracts under ICB against competition from experienced bidders from developed countries. Considering that an average World Bank project - and, presumably, ADB and IDB projects yield similar results - consists of 60 per cent civil works, 30 per cent equipment and 10 per cent services, in value terms, this would not appear to be surprising.

77. In the absence of a statistical analysis of the bids received under ICB conditions for the Banks' projects and of the success ratios for bidders from developed countries, on the one hand, and from developing countries, on the other hand, one is compelled to make educated guesses as a basis of diagnosis and prescription. On the basis of informally-collected data for the year 1981, nearly 96 per cent by number of the civil works contracts (about 74 per cent by value), 48 per cent by number of the equipment contracts (about 60 per cent by value) and 45 per cent by number of consultancy contracts (64 per cent by value) were awarded to developing countries.

78. The report of the Caracas Conference emphasizes the importance of prompt and timely receipt of invitations to tender, along with full information. The Banks customarily require the transmission of copies of the invitation to bid or the advertisement of the invitation, to local representatives of those of their member countries which are potential suppliers of the goods or works required and also to Switzerland. The invitation or advertisement is required to be sent to the government agency responsible for foreign trade, if any member country does not have local representation. This notification has to be made at the same time as the advertisement of the invitation to bid.

79. In spite of these admirable arrangements, there is evidently enough lack of promptness and timeliness in the receipt by developing country bidders of the necessary information about the invitations to tender to merit a mention in the above-mentioned report. This must be attributed at least in part to the inadequate and unsatisfactory communication system between the local agents of developing countries at the headquarters of the banks concerned and the prospective exporters and contractors in those countries.

80. Since the emphasis under ICB is placed on cost-efficiency, 11/ it is only natural to expect that developed country bidders, with their considerable advantage in efficiency, should win most of the contracts. However, since civil works, which account for about 60 per cent of the value of an average project, are generally labour-intensive and local resource-intensive, developing country bidders have succeeded in winning the bulk of these contracts.

81. There are other factors which favour developed country bidders, such as a long-standing consumer preference for or greater confidence in those enterprises and the financial and risk insurance backing which they, unlike developing country bidders, are able to obtain.

82. While experience is always the best teacher, it has been suggested that a number of steps could be taken by the Banks and the Governments of the borrowing countries to enable developing country bidders to overcome their handicaps and win contracts under ICB. For example, they could allow a margin of local preference and a margin of regional (or developing country) preference. Governments could give a stated margin of preference to bidders from developing countries vis-à-vis those from developed countries.

The objectives set out in, or derived from, the report
of the Caracas Conference

83. The objectives are:

- (a) To identify the disadvantages faced under ICB by bidders from developing countries for projects financed by the Banks vis-à-vis bidders from developed countries;
- (b) To propose appropriate measures to overcome those disadvantages, for adoption by developing countries desiring to execute such projects;
- (c) In this context, to examine particularly the possibilities of ensuring that information on the conditions of the bidding is provided on a timely and prompt basis, and the question of giving special treatment to bidders from other developing countries, consistent with national practice; and
- (d) To examine the possibilities and implications of the extension of preferential treatment by developing countries in cases of government procurement, to suppliers from other developing countries, taking into account cost, quality and the time factor.

Preferential treatment

84. The World Bank and the IDB permit the Government of the borrowing country to accord a limited margin of preference to domestic manufacturers or to manufacturers in other member countries which have joined with it in a regional preferential tariff arrangement designed to bring about economic integration, such as a customs union or a free trade area. As regards civil works contracting, the World Bank does not normally accept a margin of preference being accorded to contractors in the borrowing country or elsewhere in the regional group. However, for a limited period, at the request of the borrowing country a 7 1/2 per cent margin of preference to contractors in specified low-income countries may be accepted.

85. The ADB does not permit even such local preference. The IDB does permit a 15 per cent margin of preference to domestic bidders as also to bidders from other member countries in the Latin American region. (For

the evaluation of the bids, the comparisons of quotations are made exclusive of customs duties and other import taxes). Since the cost of the preference has to be borne by the borrowing country, the regional preference facility permitted by the IDB has remained virtually unutilized.

Major issues and constraints

86. The fact that, in terms of numbers, some 96 per cent of the contracts awarded for civil works are won by developing country contractors, while in value terms the proportion is 74 per cent (see paragraph 77 above), must be attributed to the lower labour costs normally prevailing in these countries, which presumably permit them to quote competitively. The corresponding, but distinctly lower, percentages in respect of equipment and consultancy contracts are presumably due, for the most part, to the lower levels of industrial and technological development in developing than in developed countries.

Lack of prompt and timely receipt of information

87. The arrangements made by the Banks to disseminate information for ICB appear to be appropriate and adequate. The problem, where it exists, probably lies in the speedy dissemination of this information within the developing countries themselves.

Consumer prejudice

88. Consumer prejudice against newcomers in general, and those from developing countries in particular, could be another factor influencing the evaluation of bids.

Lack of finance

89. Unlike contractors in developed countries, those in developing countries often lack institutional financial backing, which makes it difficult for them to compete effectively, especially since both mobilization and equipment costs are quite high. Some help is given by the World Bank, which is often willing to make a down payment of up to 20 per cent of the cost of the contract, to cover the start-up costs. The financial problem of developing country contractors is compounded when there is foreign-exchange stringency in their own country and also a credit squeeze.

Procedural delays in payments

90. Delays in payments by the Banks, for procedural reasons, hurt

developing country suppliers, which are short of resources, more than their competitors in developed countries.

Lack of insurance cover

91. Unlike bidders from developed countries, those from developing countries are often handicapped by a lack of good insurance cover or a guarantee mechanism. Thus, a contractor from a developed country, armed with a performance bond or guarantee from his bank or an official institution, is in a much stronger position than one from a developing country who lacks such guarantees. In the event of a failure to perform his contractual obligations a contractor from a developing country has no insurance cover to meet his performance obligations.

Preferential treatment of other developing countries in government procurement

92. To accord a preference in procurement action always implies an element of subsidization of the preferred party. It means making some sort of sacrifice. Since developing countries are, by definition, economically weak, how can one weak country be called upon to subsidize another weak country? The lack of utilization of the regional preference margin permitted in IDB-financed projects is a good example of this difficulty.

Some possible options

Prompt and timely receipt of information

93. Computerization, centralization of responsibility in one institution for expeditious dissemination of information and the preparation of rosters or panels of qualified contractors, suppliers and other possible bidders would appear to offer some solution to the problems encountered.

Consumer prejudice

94. The Banks should use their system of performance evaluation to give considerable publicity to all good performances by developing country contractors and suppliers.

Lack of finance

95. One clear solution would be for developing countries to set up the necessary institutional arrangements to provide financial backing to

their contractors and suppliers who bid for work in other developing countries. Another solution would be for the World Bank to increase the amount of the down payment to more than 20 per cent in the case of contractors from developing countries, on a discretionary basis.

Procedural delays in payments

96. The obvious cure for procedural delays is to review procedures and then rationalize and streamline them in order to expedite the payments.

Lack of insurance cover

97. The successful example of the Philippine Export and Foreign Loan Guarantee Corporation is worth following. Very briefly, Philguarantee, as the above corporation is called, issues performance guarantees against the failure of Filipino contractors and suppliers to perform overseas according to contract. Exporters of services are supported through bid bonds, performance bonds, advance payment guarantees and guarantees on construction loans.

Preference in government procurement

98. Clearly, no non-oil producing developing country would be able to subsidize for long on a unilateral basis the purchases from another such country. One obvious, but not very easy, solution is for a multilaterally-financed fund to bear the cost of the subsidy, provided that the purchase is otherwise fully justified on the economic grounds of cost, quality, delivery, after-sales service, etc. Another solution would be to work out modest bilateral swap-subsidy arrangements. For example, developing country A buys goods and/or services from developing country B involving a subsidy of \$ X million in Year 1. Then country B should either buy goods and/or services from country A before the end of Year 1 also involving a total net subsidy of \$ X million or pay the sum in cash as compensation to country A. If the central banks of the two countries can perform clearing-house functions, this may not be too difficult.

99. Evidently, considerations other than price and quality (for example, political relations or close economic ties), enter into the determination of the award of contracts. Developing countries should be expected, therefore, to diversify their sources of supply and, ceteris paribus, give preference to procurement from other developing countries.

Chapter V

SUMMARY AND CONCLUSIONS

Introduction

100. The Final Report of the High-Level Conference of the Group of 77 on ECDC attaches great importance to financial co-operation among developing countries.

101. The report makes innovative and wide-ranging recommendations, not all of which can produce results in the short run.

102. In view of the importance attached by the Group of 24 to recommendations which are modest in conception, but likely to produce results in the short run, recommendations dealing with the following three topics have been selected for attention in this paper: (a) Trade financing, especially by trade development banks; (b) Regional development banks; and (c) International competitive bidding and the disadvantages faced by bidders from developing countries.

Trade financing, with special reference to regional and interregional trade development banks

103. For attaining the GDP growth targets of the International Development Strategy for the 1980s, rapid growth of exports of manufactures from developing countries is essential. For attaining the export targets, high quality, competitive pricing, modern marketing techniques and after-sales service will need to be complemented with export credit.

104. National export credit schemes are useful to make immediate payment to the exporter, even in the case of sales on credit, but they cannot solve the problem that the national economy has to wait to receive the foreign exchange accruing from the sale. Hence, the need for an international export credit scheme.

105. A limited solution to the problem of deferred foreign-exchange receipts is to engage in barter trade, now called counter-trade. Counter-trade covers the exchange of goods and/or services on either side. But, the difficulties of exactly matching the packages, of implied fixed prices, exchange rates and interest rates over long periods of instability, limit the applicability of this solution.

106. BLADEX, the Latin American export credit institution, is the nearest approximation in reality to a trade development bank. It performs four functions with respect to export credit paper: banking, i.e., discounting export bills and holding them till maturity,

merchanting, i.e., buying and selling export bills; brokering, i.e., bringing together buyers and sellers of different kinds of export paper; and, guaranteeing, i.e., issuing its guarantees to improve the marketability of export paper.

107. However, BLADEX does not yet have the support of an insurance facility, nor a sufficiently large secondary market. Its resources could be used more effectively if it reduced its banking and increased its guaranteeing function, left short-term export credits to the banks, concentrated on medium-term credits and guaranteed longer-term credits on a discretionary basis.

108. The UNCTAD secretariat has proposed the setting up of an International Export Credit Guarantee Facility (IECGF). Such a facility is potentially useful to all developing countries exporting manufactures, especially in their trade with each other. Both BLADEX and IECGF preclude concessional financing of exports. IECGF would mainly issue guarantees and only rarely, if at all, have a banking function by engaging in direct financing. IECGF would restrict itself to exports of capital goods, primarily on the grounds of conserving its scarce resources for the high-priority uses.

109. The proposed IECGF would benefit greatly if it set up institutional arrangements for a risk insurance cover of some kind.

Regional development banks

110. In the ADB, where developed countries within and external to the region together hold a majority of votes, the dilution of that control is difficult. Two possible ways of achieving this are: (a) to persuade developed member countries to remove their regular contributions of capital to these banks from their aid budgets; and (b) to persuade capital-surplus developing countries external to the region to make large capital contributions.

111. In the ADB, at least 60 per cent of the capital stock has statutorily to be owned by members of the region, which would still leave a margin for manoeuvre in the 40 per cent share owned outside the region.

112. The gearing ratios (subscribed capital:borrowing) of both banks are excessively conservative and can easily be increased to, say, 1:2, in view of their excellent past borrowing record.

113. Insufficiency of funds which are usable on soft terms seriously limits their ability to vary the terms of assistance to suit each individual borrowing country's economic circumstances. Increased contributions usable on soft terms could help.

114. Another way worth studying would be to charge above-average interest rates to the better-off borrowers, from which to subsidize, at least in part, the below-average interest rate charged to the relatively poorer borrowers.

115. A bolder switch, from project lending to programme lending, accompanied by selective conditionality, fully supportive of the development goals, policies, etc., of the borrowing country, would still keep the lending secure, because of the concern of borrowers as a matter of high priority to nurse and safeguard their sources of multilateral long-term finance. The switch would meet the needs of many borrowers more effectively.

116. Co-financing of equity investments is not undertaken by these banks. Co-financing of loans can be more successful if (a) provided in equal thirds by the development bank, official sources on concessional terms and commercial banks; and (b) the Government guarantee secured by the development bank covers the entire package.

International competitive bidding and developing country bidders

117. The World Bank, the ADB and the IDB (referred to collectively as "the Banks") require their borrowers to resort to international competitive bidding (ICB) for the award of contracts for projects which they finance, because their Articles of Agreement enjoin the most economical and efficient use of their resources.

118. It is believed that even now significant proportions of the equipment and consultancy contracts awarded under ICB are won by bidders i.e. contractors and suppliers from developed countries. In recent years, bidders from some developing countries such as Brazil, India, the Philippines, the Republic of Korea and Romania have begun to win a few contracts under ICB. An average World Bank project consists of 60 per cent civil works, 30 per cent equipment and 10 per cent services, in value terms. It is not surprising that the bulk of the civil works contracts are won by developing country contractors.

119. However, much leeway remains to be made up by developing countries in winning equipment and consultancy contracts. Some of the reasons could be the more prompt and timely communication of information to the potential bidders from developed countries, the greater resources and cost-efficiency of developed country bidders, consumer prejudice against newcomers in general and against those from developing countries in particular and insufficient institutional financial backing and insurance cover against performance defaults for developing country bidders.

120. The World Bank does permit a margin of preference to domestic bidders and even to bidders in other countries belonging to a grouping

of developing countries for economic integration, which the ADB does not. The IDB's permission to accord a regional preference has remained virtually unutilized, because the cost of the preference has to be borne by the borrowing country.

121. The present arrangements made by the Banks to transmit information require the borrowing country inviting tenders promptly to make such information available to the local representative of each member country or, in the absence of such a representative, to that Government's agency responsible for its foreign trade and to Switzerland. It is up to the recipient to pass on the information to potential bidders within the country.

122. Some possible methods of improving the present situation are as follows:

- (a) Computerization of information, centralization of responsibility for expeditious dissemination of information, preparation of rosters of qualified contractors, suppliers and other possible bidders in their countries;
- (b) To overcome consumer prejudice, the Banks could give publicity to all good performances by developing country contractors and suppliers;
- (c) Banks in the borrower's country should provide guaranteed financial support to their contractors and suppliers working on overseas contracts. The World Bank could, at its discretion, agree to increase the down payment to more than 20 per cent in deserving cases among the developing countries; and it should eliminate procedural delays in payment;
- (d) For insurance cover in the form of performance bonds, guarantees, etc., the example of the Philippine Export and Foreign Loan Guarantee Corporation is worth following;
- (e) As for a margin of preference in government procurement for bids from other developing countries, this is feasible either if there is multilateral (external) subsidization of the preference margin or if some kinds of bilateral swap subsidy arrangements can be worked out between each pair of interested developing countries.

FOOTNOTES

1. See UNCTAD, "Trade and Development Report 1981" (TD/B/863/Rev.1), especially part IV, chapter IV.
2. BLADEX does provide export credit guarantees. Although almost two decades of experimenting with export credit financing on a national basis in Latin America showed that, unless the risk flank is guarded against, the experiment tends to be less than successful, there is yet to emerge a regional risk insurance facility for their exports.
3. In doing so, it batches together bills with the same maturity dates and bills of small denominations, to make up fair-sized bundles of interest to investors in the secondary markets.
4. There is no strong logical reason for restricting export-credit finance to exports of manufactures. Moreover, developing countries would benefit as importers from a broadened range of credit facilities made available by other developing countries.
5. World Bank, World Development Report 1981, Washington, D.C., table 5.3, page 62.
6. International Monetary Fund, World Economic Outlook, Washington, D.C., June 1981, table 31, page 136.
7. Asian Development Bank, Annual Report 1980, page 7.
8. The relevant passage, referring to an increase in the ordinary or interregional capital of the IDB, reads "each member shall have a right to subscribe ... to a proportion of the increase of stock equivalent to the proportion which its stock theretofore subscribed bears to the total capital stock of the Bank".
9. For a rationale of this plea, see UNCTAD, "Requirements of a Comprehensive System of International Financial Co-operation" (TD/B/C.3/161), p. 9, para. 11(ii) and UNCTAD, "Towards an effective system of international financial co-operation" (TD/235).
10. Libor is the London inter-bank offered rate of interest.
11. ICB has the purpose of affording to prospective bidders from all member countries of the World Bank and from Switzerland adequate notification of a borrower's requirements and of providing all bidders equal opportunity to bid on the necessary goods or works. The Bank is required by its Articles of Agreement to ensure that the proceeds of its loans are used with due attention to economy and efficiency and it has established detailed procedures for this purpose. Three considerations which generally guide the Bank's requirements are: (a) the need for economy and efficiency in the execution of the project including the procurement of the goods and works involved; (b) giving all the Bank's members and Switzerland an opportunity to compete in providing goods and works financed by the Bank; and (c) encouraging the development of local contractors

and manufacturers in the borrowing country. These needs and interests can best be realized through ICB, properly administered and with suitable allowance for preferences for local or regional manufacturers and, where appropriate, for local contractors under prescribed conditions. (See World Bank, Guidelines for Procurement under World Bank Loans and IDA Credits, Washington, D.C., March 1977).

ANNEX I

EXTRACTS FROM THE FINAL REPORT OF THE HIGH-LEVEL
CONFERENCE OF THE GROUP OF 77 ON ECONOMIC
COOPERATION AMONG DEVELOPING COUNTRIES
CARACAS, MAY 13-19, 1981

FINANCE

Assistance in Alleviating the Balance-of-Payments Problems of Developing Countries

65. Many developing countries are experiencing severe balance-of-payments problems because of, inter alia, lack of basic infrastructure, the deterioration in their terms of trade in the past decade, and also because of the slow growth of their share of the markets in the world economy. A full response to this problem requires action at the global level and such action must be vigorously pursued. In this connection the Conference recommended that developing countries should co-ordinate their positions to the relevant international fora and that developing countries themselves take concerted action in this area unilaterally in the spirit of solidarity and in pursuance of the principles of self-reliance through institutions of the developing countries.

66. The Conference recommended:

- (a) the enlargement of existing financing facilities administered by some developing countries and
- (b) the examination, in the context of para. 75, of the feasibility of a financing facility to meet the balance-of-payments problems, with contributions from interested developing countries and administered by them.

67. The Conference recognized that efforts in this direction should in no way limit, nor be a substitute for the expansion of resources available from the existing multilateral institutions. It was recommended that developing countries should intensify collective efforts in international fora to ensure that developed countries join the developing countries in establishing a mechanism to alleviate the financial burdens imposed on the developing countries on account of oil price adjustment and the continued inflation of the prices of their imports of goods and services from developed countries and that a group of experts be established to meet in Baghdad during the second half of 1981 in order to work out the modalities of such mechanisms.

68. The Conference recommended that developing countries concerned should seek increases in the capital of existing regional and subregional development banks comprising industrialized and developing countries. In this context, they should increase their share in such capital and so increase their participation in the decision-making processes of these financial institutions. Membership in these banks

should be enlarged to include all interested developing countries of the region as well as other developing countries wishing to be contributors, and the structures and lending programmes should more closely respond to the real needs of the developing countries, including, inter alia, their need for financing of pre-investment projects. Furthermore, developing countries should support, within these regional and subregional development financing institutions, the establishment of facilities designed to undertake equity investment and promote co-financing of equity investment, in particular from other developing countries.

69. The Conference agreed that these recommendations should be examined in light of the particular circumstances and procedures of each institution.

70. The Conference recommended that financial flows among developing countries, both governmental and private, should be stimulated through a series of policies and measures, among which the following deserve immediate attention:

- (a) Governmental and semi-governmental institutions of developing countries should increase their deposits in other developing country banks particularly those operating in international markets. Developing countries should encourage their institutions to increase their participation in the banks of developing countries on the basis of commercial practices;
- (b) Special attention should be given to the setting up of regional and interregional trade development banks as well as to strengthening existing regional ones, broadening the fields of operation and encouraging the participation of all countries concerned within the region. The Conference recommended that work on the establishment of an Export Credit Guarantee Facility should continue within UNCTAD;
- (c) Bilateral, subregional and regional payment arrangements should be reinforced and linkages among themselves should be devised in order to facilitate interregional payment arrangements;
- (d) Developing countries should encourage their institutions to take fuller advantage of opportunities existing in the developing countries' financial and capital markets, including negotiated credits and equity investments;
- (e) Developing countries should increase their participation in the purchase of financial instruments issued by national governments, central banks, public and private companies of other developing countries in the international capital market, on the basis of commercial practices.

It was also suggested that the financial authorities in developing countries with a strong position in international capital markets should assist other developing countries in securing greater access to financial resources from these sources through such means as syndicated loans.

71. The Conference recommended that interested developing countries maintain a favourable economic environment, in conformity with their national legislation, policies and economic systems, conducive to bilateral and multilateral financial co-operation among themselves through a range of investment incentives, inter alia, joint venture agreements, as well as other instruments designed to enhance the soundness and attractiveness for an increased flow of capital among themselves. Treaties to avoid double taxation would greatly facilitate this increased flow. It was recommended that to achieve the foregoing relevant measures should be elaborated by a technical group of experts.

72. The Conference recommended the improvement of the institutional framework among developing countries to ensure greater awareness of the investment opportunities, and proposed that the appropriate authorities should meet at an early date to exchange information and elaborate their details.

73. The Conference, recognizing the valuable work done by the Group of 24 and by the experts of the Group of 77, recommended that this work should continue and in particular that the Group of 24 should give greater attention to monetary and financial aspects within the programme of ECDC.

Financial Support for Development

74. The Conference recommended the establishment of a technical group of experts to study the ways and means for the dissemination among developing countries of relevant information about development projects undertaken in developing countries in order to enable other developing countries to participate in tendering of these projects through international competitive bidding.

75. In international competitive bidding the Conference recommended that, for development projects to be executed in their territories or financed by them, developing countries should take appropriate measures to eliminate the disadvantages faced by bidders from developing countries vis-à-vis those from the developed countries. These measures should include, inter alia, the provision of information on the conditions of the bidding on a timely and prompt basis, as well as special treatment consistent with national practice.

76. It recommended that preferential treatment should also be extended to suppliers from developing countries in the context of government procurement taking into account cost, quality and the time factor.

77. The Conference considered that the contribution of ECDC to financing development goes beyond the transfer of resources and should be considered as a process of mutual benefit and it discussed,

inter alia, the following points:

- (a) The need for an adequate flow of resources for development financing should be addressed by developing countries also within the framework of ECDC. The financing requirements of developing countries imply an increased commitment for the transfer of additional resources from the industrialized countries if the targets set forth in the Third International Development Strategy are to be met. The amount and modalities of development financing from developed countries has been inadequate. During the past decade financial co-operation among developing countries for development has been notably increased. However, it was mentioned that further possibilities of co-operation are open on a bilateral and multilateral basis. In this regard, several proposals which had been made, were noted.
- (b) It was considered that utilization of financial and other resources should be devoted to the priority sectors of the developing countries such as energy, infrastructure, raw materials, agriculture, capital goods, trade and transport in accordance with their national plans and programmes.
- (c) A number of financial activities might contribute to strengthening the development perspectives of developing countries. Flexibility in institutional arrangements would be helpful to accommodate different possibilities of action.

78. The Conference recommended that financing should be available for projects and activities which would lead to the further expansion of ECDC, and that this could be facilitated by strengthening the links between existing regional and subregional institutions.

79. It was recommended that a Group of Experts be established to examine the proposals made by the Non-Aligned Movement and the Group of 77, and to propose concrete measures by the end of 1981 for financial co-operation in the field of development financing, inter alia, the entry into force of the Non-Aligned Solidarity Fund, and the banks for developing countries as indicated by the Group of 77 Ministerial Meeting at Arusha in 1979 (paragraph 62).

ANNEX II

BANCO LATINOAMERICANO DE EXPORTACIONES S.A. (BLADEX)

Purposes and objectives

BLADEX is a specialized, multinational banking institution designed to promote and increase export credits to finance and refinance the growth of non-traditional exports from Latin America.

Membership

All Latin American countries subscribing to the Articles of Agreement of BLADEX are eligible for membership.

Authorized share capital

BLADEX was incorporated in Panama with an authorized capital of US \$ 99 million representing 99,000 shares with a par value of US \$ 1,000 each. The capital is divided into three classes, each consisting of 33,000 shares, as follows:

33,000 class 'A' shares: issued to any of the following Latin American institutions: central banks, other banks with a government majority shareholding and other government institutions.

33,000 class 'B' shares: issued to commercial banks or other private financial corporations or associations with Latin American majority shareholding and official international organizations such as the International Finance Corporation.

33,000 class 'C' shares: issued to any private banks or financial companies, other than those referred to in the preceding paragraphs, when duly authorized by a majority vote of class 'A' shareholders.

Operations

(a) Negotiation of bankers' acceptances, consisting of (i) intervention to place them in international financial markets; (ii) acquisition of acceptances, bills, etc., for holding in BLADEX's portfolio; or (iii) endorsement of such documents for placing in international financial markets.

(b) Direct loans or lines of credit to finance pre- and post-export of goods and services of Latin American origin.

(c) Acceptance of sight and term deposits, granting of loans and lines of credit, and issuing of securities to raise resources.

(d) The interest rates charged by BLADEX on rediscount of bankers' acceptances and the granting of loans and lines of credit are based on the prevailing international market rates for operations of similar maturity, amounts, risks and guarantees. a/

(e) Generally, BLADEX does not commit more than 10 per cent of total assets to any one country.

(f) Loans granted by BLADEX for financing exports are medium-term or long-term.

(g) The lines of credit granted by BLADEX can be short-term and revolving, for the purpose of granting subloans or for discounting eligible documents.

(h) BLADEX does not subsidize any of its loans, lines of credit or rates of discount.

a/ Rates of interest charged on its loans by BLADEX range between 1 per cent and 2.5 per cent over Libor, the actual excess varying with the size of the transaction and the credit risk spread.

ANNEX III

AN INTERNATIONAL EXPORT CREDIT GUARANTEE FACILITY (IECGF) ^{a/}

Purposes and functions

(i) To contribute to the expansion and diversification of exports of goods and services from developing countries through guaranteeing the payment on negotiable instruments of exports on credit by developing countries.

(ii) To facilitate the rediscounting in the international capital markets of developing countries' export credit paper on favourable terms.

(iii) To undertake other functions consistent with the principal role of guarantor, such as to help developing countries to market the export credit paper and to provide technical assistance regarding export financing, etc.

Membership

(i) All countries which sign the Agreement and deposit the instrument of ratification, acceptance or approval within the specified period of time are entitled to be Members.

(ii) Classification of Members: Class 'A': developing countries; Class 'B': developed countries; and Class 'C': intergovernmental organizations.

Eligible transactions

Export credit paper, to be eligible, must satisfy each of the following conditions:

(i) It arises out of exports from a Class A member;

(ii) It conforms to IECGF criteria for rules of origin;

(iii) It arises from the export of a product or service normally eligible in international trade for export credit of more than one year; and

^{a/} See UNCTAD "Operational Features of an International Export Credit Guarantee Facility: Report by the UNCTAD secretariat" (TD/B/AC/33/2 and Corr.1).

(iv) The terms of credit for the export - down payment, length of credit, modalities of payment of instalments of the principal and interest, grace period and rate of interest - conform to the current prescriptions of international agreements and arrangements, subject always to the power of the Facility to relax and add to those prescriptions.

National agency

Each Class 'A' Member shall designate an acceptable Agency to be the sole body to deal with the Facility on behalf of that Member in all respects and to discharge all its obligations to the Facility.

Procedure for applying for a guarantee

The applicant party has to satisfy himself that the export transaction for which the Facility's guarantee is sought meets all the eligibility requirements and must certify to that effect.

Guarantee by the Facility

The Facility's guarantee shall represent its unconditional obligation to pay the holder of the guaranteed export-credit paper the due amount if the drawee or acceptor has failed to honour the paper on presentation by the holder on the due date.

The Facility shall disburse the full amount of the payment not honoured by the drawee or acceptor in the currency in which the payment was due to be made.

Recourse to the exporting country

Each Member accepts the obligation to pay, on demand by the Facility, unconditionally and immediately any amount due on export credit papers guaranteed by the Facility at the Member's request and not honoured by the drawee or acceptor on presentation by the holder on the due date.

The Facility may, simultaneously with or immediately after making the payment to honour its guarantee, seek full reimbursement of the same on recourse from the National Agency of the exporter's country, in the same currency in which payment was made by the Facility.

Financial management

The Facility shall carry out its functions according to sound financial practice. The fees charged shall be such as to ensure that the Facility reaches a self-financing state as rapidly as possible.

The total value of the export-credit paper guaranteed by it shall not exceed (five) times the amount of its subscribed capital and reserves.

FINANCIAL AND MONETARY ASPECTS OF TRADE PROMOTION
IN THE CONTEXT OF CO-OPERATION AMONG DEVELOPING
COUNTRIES, WITH SPECIAL REFERENCE TO AFRICA

Arvind Barve*

I. INTRODUCTION

1. Experience has shown that many developing countries are plagued by financial constraints in their endeavour to achieve economic development. Such constraints arise from: (i) severe balance-of-payment positions; (ii) deterioration in their terms of trade; (iii) increased indebtedness and consequently heavy repayment obligations; (iv) large imports of oil; (v) continued inflationary pressures abroad and, as a result, rapidly rising prices of machinery, capital equipment and know-how; and (vi) decreasing bilateral and multilateral assistance and high rates of interest. The cumulative result of all these factors has been that the growth rate achieved by the developing countries in the 1960s and 1970s tended to fall below their aspirations as well as below the development targets set by the international community. In recent years the divergence between targets and actual growth rates has widened and reached higher proportions at the beginning of the Third United Nations Development Decade. For example, the GDP growth rate of the net oil-importing developing countries has been estimated at 3.6 per cent in 1980 and, on the present reckoning, this rate will not exceed 4 to 5 per cent in the next few years. ^{1/} When account is taken of the population growth and the deterioration in the terms of trade, these rates imply in fact stagnant per capita income in the period 1980-82.

2. The share of oil-importing developing countries in world trade was also eroded in 1980 as compared to 1973. If account is taken of exports of these countries in 1963, their percentage share in global trade in 1980 declined by 3 per cent. The value of exports from the oil-importing developing countries rose by 19 per cent in 1980, as against 30 per cent in 1979. In both years, the major part of the increase in exports was due to price hike rather than to an increase in volume. In fact, the growth in the volume of exports showed a marked decline in 1980. Imports, on the other hand, rose by about 25 per cent as compared to 1979, despite a marked decline in volume growth. The position of least developed countries was even worse: their share in world trade has stagnated at 0.5 per cent for the last decade.

3. The above developments reflect the existence of a variety of factors at work, some of which are beyond the control of the developing countries. For instance, the current-account deficit of these countries

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has been estimated to have edged up from \$ 45 billion in 1979 to about \$ 96 billion in 1981. The deficit of net oil-importing countries has been estimated at \$ 78 billion. The main factor leading to sharp increases in the current-account deficits has been the deterioration in their terms of trade. For the net oil-importing developing countries, the terms of trade deteriorated throughout the 1970s at an average rate of 3.2 per cent. In 1980, the widespread declines in the rate of growth of export volumes were accompanied by declines averaging about 6 per cent in their terms of trade. In 1981, the decline is expected to continue at the rate of 4 per cent. In recent years, higher interest payments and remittances of profits have further contributed to the erosion of the balance of payments of the deficit developing countries. These payments amounted to \$ 34 billion in 1980 and are expected to reach a staggering figure of \$ 44 billion in 1981. This sharp increase reflects the rapidly rising outstanding external debt which is now approaching the \$ 400 billion mark. Available data for 39 developing African countries ^{2/} show that the overall debt of these countries, including undisbursed amounts, rose from \$ 13 billion in 1970 to over \$ 79 billion in 1979, while debt servicing increased from \$ 0.8 billion to \$ 9.9 billion in this period. These figures represent an average annual growth rate of approximately 26 per cent of overall debt and about 18.5 per cent of the debt servicing during the above period. The marked increase in interest rates in capital markets has not only affected new borrowings but also pushed up the cost of servicing of old debts. It has been estimated that an increase of one percentage point in interest rates in capital markets would result in an additional debt-servicing cost of nearly \$ 2 billion for the developing countries. ^{3/} Debt-servicing payments, including profit remittances of deficit developing countries, have been estimated to equal 28 per cent of their export earnings in 1981 as compared to 25 per cent in 1980.

4. The international economic situation facing the developing countries at the beginning of the 1980s is hardly conducive to growth. It is characterized by slow growth in the principal markets for their exports, weakening terms of trade, unusually high cost of borrowings in capital markets and dim prospects of official development assistance flows in real terms. Moreover, the policy measures of developed market-economy countries to combat inflation and unemployment and to overcome recession and insufficient structural flexibility have aggravated the problems of the developing countries.

II. PROBLEMS OF DEVELOPING COUNTRIES IN AFRICA

5. The effect of unfulfilled promises of global development strategies has been more sharply felt in Africa than in the other regions of the third world. Instead of improving the economic situation of the continent, successive so-called growth strategies have made it stagnate and become more susceptible than other regions to the economic and social crises suffered by the industrialized countries. Thus Africa has been unable to achieve any significant growth rate either in its GDP or its share of the world trade in the past 20 years. This is a paradox when one bears in mind the vast human and natural endowment of the continent. In addition to its reservoir of human resources, the African

continent has 97 per cent of the world reserves of platinum, 64 per cent of manganese ore, 25 per cent of uranium, 13 per cent of copper, 20 per cent of world hydro-electrical potential, 20 per cent of traded oil in the world (excluding the United States of America and USSR), 70 per cent of world cocoa production, one-third of coffee output, and 50 per cent of palm produce. Its resources of bauxite, nickel, lead, diamonds, soda ash, cement, pyrethrum, sisal and cashewnuts are immense.

6. Despite these extensive resources, Africa remains the least developed continent in the world. It has 20 of the 31 least developed countries so classified by the United Nations. The GDP of the continent is only 2.7 per cent of the world's GDP and its per capita income averages \$ 166 only. In the last two decades - i.e. 1960-1980 - the average annual rate of growth of the continent has been no more than 4.8 per cent, a figure which conceals divergent realities ranging from a 7 per cent growth rate for the oil-producing countries down to 2.9 per cent for the least developed countries.

International trade of Africa

7. In the field of international trade Africa is far behind the other continents. The share of Africa in international trade is no more than 4.57 per cent. Table I gives the figures for Africa's trade and its share in the world trade during the last few years, and shows that during the last 17 years Africa's share in world trade has remained more or less stagnant at below 5 per cent.

Table I
(million \$)

Year	World trade	Africa's trade	Percentage share
1963	154 700	6 640	4.29
1968	237 800	9 600	4.03
1977	574 300	20 870	3.63
1978	1 302 500	45 700	3.50
1979	1 638 000	66 580	4.06
1980	1 973 000	90 200	4.57

Source: GATT, International Trade, 1980/81.

Regional composition of Africa's trade

8. A major part of Africa's trade is with the developed market-economy countries. Africa's trade has been geared, through its history, to the needs of the former metropolitan powers. After independence the same pattern has persisted with no more than very insignificant modifications

despite the conscious efforts of individual countries to effect major structural changes. As a result, the developed market-economy countries account for more than three-fourths of Africa's imports and exports. Intra-African trade has, therefore, remained infinitely small, as is evident from table 2.

Table 2
(million \$)

	1979	Percentage share	1980	Percentage share
1. Total trade of Africa	66,580	100.0	90,200	100.0
2. With industrial area	56,110	84.2	73,985	82.0
(a) Western Europe	33,655	50.5	45,375	50.3
(b) EEC	28,900	43.4	37,475	41.5
3. With developing area	7,715	11.6	12,095	13.4
(a) Africa	2,300	3.4	4,200	4.6
(b) West Asia	705	1.1	1,680	1.9
(c) South-East Asia	610	1.0	770	0.8
4. With eastern trading area	2,260	3.4	3,445	3.8

Source: GATT, International Trade, 1980/81.

9. From the figures in table 2, it is amply clear that more than 80 per cent of Africa's trade is with the developed market-economy countries, particularly with the EEC. Africa's trade with other developing countries is small, amounting to only 13.4 per cent of the total in 1980. Intra-African trade has been a minuscule 4.6 per cent only.

10. The low volume and uneven pattern of intra-regional trade has been largely due to lack of complementarity in the production structures of the different economies. The general pattern of production and trade in the region is, by and large, similar to that of other developing regions: for most countries exports consist mainly of agricultural or mineral products and imports of foodstuffs, oil and manufactured capital and consumer goods. Dependence on a single primary product to generate major export earnings ranges from 30 per cent of total exports of Kenya (coffee) to 88 per cent in Zambia (copper), Mauritius 67 per cent (sugar), Seychelles 70 per cent (copra), Somalia 82.8 per cent (live

animals), Uganda 85 per cent (coffee), and so on. One or two commodities account for at least one-half of exports for 13 of the 16 countries for which data have been available. 4/

11. As a result of this production structure, the principal markets for exports of the region are in Europe and North America. For some countries the European Economic Community (EEC) has become an increasingly important market, partly as a result of tariff preferences granted under the terms of the Lomé Convention. The EEC accounted for 41.5 per cent of the total trade of Africa in 1980.

12. While the EEC is the dominant trading partner of Kenya, the United Republic of Tanzania and Uganda, South Africa has been a major supplier to the countries in the southern region. A large proportion of the import needs of Botswana, Lesotho and Swaziland are met by South Africa, the dominant member of the customs union between the four countries. In the past three years, imports from South Africa have accounted for almost two-fifths of total imports of Malawi, about one-fifth of Mozambique imports, 13 per cent of Angola, 12 per cent of Mauritius and 7 per cent of Zambia. It is understood that 30 to 40 per cent of Zimbabwe imports originate in South Africa.

Obstacles to larger intra-regional trade

13. The small amount of intra-African trade gives legitimate cause for anxiety because of its cardinal importance in the economic development of African countries. Apart from the violent fluctuations and the downward price trends which the primary commodities forming the bulk of Africa's exports face, it is a well-known fact that these exports develop only weak linkages. The needs of development therefore dictate that African countries should develop the export of manufactures and semi-manufactures which have more stable and rapidly expanding markets and which are capable of forging strong industrial linkages.

14. The markets of developed countries are at present, and will probably continue to be for the foreseeable future, beyond the reach of most African manufactured products not only because of the superiority of their own products and their cost price advantage but also because of the maintenance of a variety of trade barriers which those countries have been rather reluctant to dismantle. In the circumstances, a realistic way to the diversification of the exports of African countries from their excessive dependence on primary commodities to manufactured goods is through accelerated growth of intra-African trade and trade with other developing countries. In addition, expanded intra-African trade will provide the advantages of economies of scale needed for building a mass production manufacturing base in the fragmented African countries. This will strengthen the competitive power of the manufactured products not only in the markets of other developing countries but also within the domestic markets.

15. Developing countries in Africa face several bottlenecks in their endeavour to expand intra-regional trade. The lack of export culture, the small size of their production, lack of exchange of information on trade, the difference in the currency system, tariff and non-tariff barriers and absence of well-developed infrastructure and services such as banking, insurance, credit facilities are serious obstacles to increased trade in the region. Inadequate transport and communication systems, multiplicity of currencies, and their non-convertibility and absence of appropriate clearing and payment systems further compound their problems. At present there are no trade-financing facilities at the national, sub-regional and regional level. The lack of institutional support has been a major bottleneck to the promotion of intra-regional trade. The African situation therefore demands an integrated programme of activities in the field of trade promotion, market research, credit facilities, financial and monetary policies.

Lagos Plan of Action: a new African strategy

16. It was against this background that a new African strategy in the field of international trade and finance was adopted by the African Heads of State and Government of the Organization of African Unity (OAU) in Lagos during the Second Extraordinary Session of the Assembly, which was exclusively devoted to the economic problems of Africa. The Assembly reiterated, among other things, the need to expand and promote closer economic relations not only at the intra-African level but also with countries in other developing regions. ^{5/} It is therefore necessary to underscore once again the importance of this development, which is in line with the programme for collective self-reliance adopted at various fora of the Group of 77 and by the international community itself.

III. MONETARY AND FINANCIAL CO-OPERATION AMONG DEVELOPING COUNTRIES

17. It is generally recognized that schemes for trade expansion among developing countries, particularly African countries, through liberalization of tariffs and other obstacles to such trade need to be supported by a number of concerted monetary and financial measures, including multilateral payments and clearing arrangements, trade financing facilities and capital and financial flows. The various facets of economic and financial co-operation between developing countries have been discussed at various meetings of the Group of 77 held at Mexico City, Arusha, and Caracas. The final report of the High-Level Conference on Economic Co-operation Among Developing Countries, held in May 1981 in Caracas, considered the subject of finance, among others, at great length. Several action-oriented and wide-ranging recommendations and proposals have been made in that report. Among these, the following are of immediate concern to Africa:

- (a) Regional payments and clearing arrangements;
- (b) Export credit guarantee schemes;

- (c) A trade and development bank;
- (d) International export credit guarantee facility.

IV. PAYMENT FACILITIES AND PRACTICES IN THE AFRICAN REGION

18. The International Monetary Fund (IMF) has carried out a detailed study on payment arrangements and the expansion of trade in eastern and southern Africa. According to this study, all countries in the region, except Angola and Mozambique, are members of IMF. These countries maintain their exchange rates fixed within a relatively narrow margin of selected currencies or a basket of currencies. The currencies of Djibouti, Ethiopia and Somalia are pegged to the U.S. dollar, the currencies of the Comoros and Madagascar to the French franc, and the currencies of Lesotho and Swaziland to the South African rand. The currencies of Kenya, Malawi, Mauritius, the Seychelles, Uganda and Zambia are linked to the SDR. The United Republic of Tanzania pegs its currency to a basket of currencies of its main trading partners, Zimbabwe to a weighted currency basket and Botswana to a basket of currencies consisting of SDR and the rand. Angola and Mozambique establish exchange rates for the kwanza and the metical against the U.S. dollar. The U.S. dollar serves as the intervening currency for 12 countries, the French franc for two countries and the pound sterling for another two countries. 6/

19. Although the various practices pertaining to currency pegs have posed no serious problem for intra-regional settlements, experience in other regions indicates that regional integration would be facilitated and expedited by harmonization of pegging practices so as to promote exchange-rate stability within the region.

Bilateral payments agreements

20. Barter trade has been increasingly used by some developing and developed countries as an effective instrument of trade promotion. However, barter trade has not so far been used as a means of trade expansion in Africa. Even the mechanism of promoting trade in the African continent through bilateral payments agreements has not been used extensively. The proportion of overall intra-regional trade conducted under bilateral payments agreements is meagre. There is only one major instance of a bilateral payments agreement - i.e. between Mozambique and the United Republic of Tanzania - where all payments between the two countries are settled through clearing accounts maintained by the respective central banks and, to date, no settlement has been effected in convertible currencies. It is understood that some countries have bilateral payments agreements with non-IMF members and with countries outside the continent. For example, Mozambique is reported to have such agreements with Bangladesh, Egypt, Iran, Pakistan, Romania, Syrian Arab Republic and Viet-Nam, and an inactive agreement with the Congo. Similarly, Angola has bilateral payments agreements with Cape Verde and Zaire.

21. A common feature of most of the bilateral payments agreements is that payments for imports are made by crediting the exporting country's clearing account, which may be denominated in U.S. dollars or pounds sterling. As trade under these agreements is generally not balanced, there is a possibility that the net exporting country will build up inconvertible balances in its favour which cannot be used for making payments to any other country. The only way to use these balances is to import goods. Therefore there is a built-in limitation on increased trade among various countries under this system of bilateral payments.

Existing banking facilities

22. A number of international banks, such as Barclays, Standard Bank, Citibank, Grindley's Bank, Habib Bank, Bank of India, Bank of Baroda, British Bank of Middle East, Bank of Credit and Commerce International, to mention only a few, have branches or subsidiary relationships in different countries of Africa. There are also local banks doing international business. These banks maintain relationships with each other as well as with banks in major financial and commercial centres such as New York, London and Paris. Only 9 out of 17 countries in the region for which data are available have branches or subsidiaries of foreign banks. These foreign banks and local banks operate under the guidance of the central bank of the country concerned and follow the banking practices obtaining in those countries. Although most of the foreign banks have been operating for a long period and are experienced in handling international trade according to the world conditions, they do not in Africa follow the established and worldwide adopted system of financing trade, as is shown in the next chapter.

23. Although most payments for intra-regional trade are channelled through the commercial banks and settled in convertible currencies, several central banks in the region have established reciprocal accounts on a bilateral basis with other central banks in the region. These account relationships probably originated largely during the operative period of the East African Community when the central banks of Kenya, Uganda and the United Republic of Tanzania each maintained reciprocal accounts in shillings with the other two central banks to clear payments within the Community. Reciprocal accounts are now maintained between the central banks of Kenya and Zambia, Swaziland, Uganda, the United Republic of Tanzania and Ethiopia; those of Malawi and Zambia; those of Botswana, Swaziland and the United Republic of Tanzania; those of Ethiopia and the United Republic of Tanzania; those of Somalia and Uganda; and those of Malawi and Swaziland. 7/ When there is a sufficient volume of trade, accounts are also maintained with other neighbouring countries. Balances in these accounts could be used for import of goods and services, for transfer to other external accounts and for purchase of foreign exchange. Each central bank quotes daily exchange rates for currencies in which it maintains reciprocal accounts.

24. The maximum and minimum limits of reciprocal accounts have been fixed by the countries concerned and vary depending on the volume of trade. For example, Kenya's accounts with Ethiopia, Uganda, the United

Republic of Tanzania and Zambia have minimum and maximum limits of KShs. 1 million and KShs. 10 million, respectively. Kenya's account with Burundi has a minimum limit of KShs. 100,000 and a maximum limit of KShs. 500,000 and its account with Swaziland has a minimum limit of KShs. 8,000 and a maximum limit of KShs. 800,000. The accounts between Kenya and Rwanda have no minimum limit but have a maximum limit of KShs. 4 million. ^{8/} In practice, these accounts may sometimes be drawn down below the agreed minimum limits but no overdrafts are permitted. There is no offsetting of debts and credits and no automatic provision for periodic settlement of balances below the maximum.

25. These reciprocal accounts, according to the Central Bank of Kenya, have greatly facilitated prompt payments to exporters during the periods of uncertainty and have helped in forging closer links between the countries concerned. The operation of these accounts has also strengthened the bilateral trade relations.

26. In spite of these reciprocal accounts, both intra-regional and international trade is invoiced and settled in convertible currencies. It has been estimated that 90 per cent of intra-regional trade transactions are settled in convertible currencies. Among the convertible currencies, the United States dollar and the pound sterling are the main trading currencies, accounting for 60 to 85 per cent and 10 to 45 per cent respectively in the various countries. Trade is also conducted in French francs mainly in those countries having strong French connections. The rand is used for settlement of trade in Botswana, Lesotho, Swaziland and Malawi. Local currency is extensively used in the conduct of border trade.

V. A CASE FOR MULTILATERAL CLEARING ARRANGEMENTS ON A SUB-REGIONAL BASIS

27. A large number of developing countries are at present members of the sub-regional and regional multilateral payments clearing or credit arrangements and recent years have witnessed an increase in and strengthening of such sub-regional and regional schemes. The following regional and sub-regional payments and clearing arrangements are in operation at present:

- Central American Clearing House;
- LAFTA Payments System and Reciprocal Credit Arrangements;
- Asian Clearing Union;
- West African Clearing House;
- CARICOM Multilateral Clearing Facility;
- Great Lakes Economic Community Payments Arrangements;
- Regional Co-operation for Development Payment Arrangements.

These payments arrangements are working satisfactorily. In order to provide a boost to the intra-regional trade in the African continent, there is a need for establishing such sub-regional clearing arrangements in eastern and southern Africa and in central Africa. As is evident from the above there is already in existence a West African Clearing House. 9/

28. The advantages of setting up sub-regional payments arrangements are many and varied. The most important advantage is that the working balances in convertible currencies held by each country could be reduced, since convertible currencies would be used only for settlement of net balances at the end of each settlement period. In fact, deficits with one country or a group of countries will be offset by surplus with others. A sub-regional clearing arrangement will lead to savings in the cost of effecting intra-sub-regional settlements that will accrue to individual businessmen. A saving arises from a reduction in the number of conversions. The invoicing of intra-regional trade in convertible currency such as the pound sterling requires businessmen to bear the cost of conversion from the importer's currency to pound sterling and from pound sterling to the exporters's currency. If a transaction under a clearing arrangement is invoiced in either trading partner's currency, the cost of conversion at one end would be saved. Payment of fees and commissions charged by bankers would also be saved. Settlement under regional and sub-regional clearing arrangements would avoid payment of certain charges and commissions to bankers in London and New York. Moreover, there would be indirect advantages accruing from such a facility: the clearing facility would instil greater business confidence in the regional payment system and thereby indirectly encourage the conduct of trade by less costly methods of payment than the expensive method of a letter of credit. The sub-regional clearing facility would also promote the use of local currencies which would promote confidence in the exchange of goods and services in the regional currencies, and would result in savings in the cost of settlement.

29. It is sometimes argued that channelling of sub-regional trade through a clearing arrangement could have an adverse effect on the availability of financing for regional banks from foreign banks, such as the line of credit or overdraft facilities that may be obtained from banks with whom compensating foreign-exchange balances are maintained. This argument does not seem to have general validity as there is no fear of loss of financial accommodation in New York or London, given the low volume of intra-regional trade. Moreover, the operation of several clearing facilities in developing countries is ample proof that this argument is not valid and that their financial position has not suffered.

30. Sometimes a point is made that the usefulness of the clearing facility proposal may be in jeopardy if the net creditors in a multilateral system tend to have reservations in accepting very long settlement periods. At the same time it is in the interest of net debtors to extend the settlement period. However, a point in favour of the clearing facility is that it cannot serve as an instrument of balance-of-payments financing and the provision of medium-term credit must be considered separately. In some regions, multilateral clearing

facilities are associated with credit facilities designed to help finance net debtor positions. The CARICOM Multilateral Clearing Facility enables a member to defer settlement of up to 50 per cent of its net debtor position to the following settlement period. Under the Multilateral Financial Assistance Agreement among 12 Latin American countries (known as the Santo Domingo Agreement) a member may draw upon lines of credit made available by other members up to an amount not exceeding its deficit with partner countries in the clearing system in the previous settlement period.

Salient features of a clearing arrangement

31. The IMF study on payment arrangements in eastern and southern Africa has provided guidelines on the clearing facility. Keeping in view these guidelines and the features of other clearing arrangements, it is suggested that the establishment of a clearing facility should have the following features:

- (i) All countries in the region should join the scheme to ensure its success;
- (ii) Given the virtual non-existence of intra-regional transactions other than for trade and related activities such as freight, insurance, etc., capital transactions should be excluded from the scope of the facility;
- (iii) Among the trade and trade-related transactions to be covered, exceptions should be as few as possible;
- (iv) Payments related to supply of petroleum and petroleum products should be excluded from the scope of the facility, as has been done by other regional clearing facilities;
- (v) The clearing facility should post debt and credit items to reflect transactions among members in a unit of account acceptable to the parties concerned. Both the Asian Clearing Union and the West African Clearing House use a unit of account based on the Special Drawing Rights (SDR) which is suitable for a relatively diverse group of countries, whose currencies are pegged to different currencies or baskets of currencies. The unit of account is based on the U.S. dollar in the CARICOM Multilateral Clearing Facility and the Central American Clearing House, where participants' currencies are pegged to the U.S. dollar;
- (vi) As regards invoicing, two alternatives are suggested: mandatory invoicing in the unit of account or in one of the trading partner's currencies, at the option of the businessmen. The first method of invoicing would simplify the book-keeping of the clearing house but would require traders and bankers to have thorough familiarity with the unit of account to avoid any complications. The second alternative would make it necessary to have a detailed agreement on the valuation of invoices denominated in

regional currencies in terms of the unit of account for settlement purposes;

- (vii) Since each member country would retain its freedom to determine its own exchange rate and pegging policy, the arrangements would contain provisions safeguarding each country's claim on the other in the event of an exchange-rate adjustment by a member vis-à-vis the unit of account. The general principle would be that in the event of an exchange-rate adjustment, all outstanding claims would be settled among participating members at the previous exchange rate. In the long run, adoption of a common currency or basket for pegging the region's currencies should be adopted to facilitate exchange-rate stability among the regional currencies;
- (viii) In the proposed clearing arrangements, limits should be placed on each participant's net creditor or debtor position with a view to enable only settlements up to those amounts to be positioned to the end of the interim period between settlement dates. If a member's net debtor position exceeds the pre-agreed limit, the country is required to pay the excess in convertible currency to the net creditors in proportion to their credit positions. If, on the other hand, a member's net creditor position exceeds a certain limit during the interim period, it would have the right to receive payments of the excess by the net debtor in proportion to their debtor positions;
- (ix) In order to generate confidence among businessmen and banks, provisions should be included in the scheme whereby individual payments channelled through the clearing facility are backed by the guarantee of the central bank or the government of the member country;
- (x) Other features of the facility might include provisions for payment of interest to members with net credit positions and safeguards in case of default by an importer, a bank or the central bank.

32. It is recommended that the developing countries in eastern and southern Africa who have agreed to form a Preferential Trade Area (PTA) and the countries of central Africa undertake the task of embarking on the establishment of a sub-regional clearing facility in the area. 10/ The above is a suggested outline; details can be worked out after mutual discussions. The setting up of a sub-regional clearing facility would be a right step in the direction of expanding intra-regional trade.

VI. EXPORT FINANCING FACILITIES

33. A developing economy aiming at expanding and diversifying its structure of trade by promoting exports of manufactured and semi-manufactured goods may face many new challenges and many new needs,

such as higher levels of domestic financing for expanded effort, large amounts of credits to extend to overseas buyers, adequate cover against the risks involved in export business and so on. It is generally agreed that a suitable export financing system should be evolved by each country, as part of the trade promotion efforts. With the gradual emergence of buyers' markets for all types of goods and services traded internationally and keen competition among exporting countries to gain a major share of the world markets, exporters - particularly from developed market-economy countries - are making growing use of export credit and export credit insurance as a major sales promotion technique. The sales promotion value attached to the export credit schemes aroused the interest of many developing countries in order to improve their foreign-exchange earnings. Developing countries and territories such as Argentina, Brazil, Chile, Colombia, Hong Kong, India, Indonesia, Jamaica, Malaysia, Mexico, Pakistan, the Philippines, the Republic of Korea, Singapore, Sri Lanka and Thailand have successfully introduced such schemes. In Africa, Zimbabwe is the only country which has introduced such a scheme. Kenya and Mauritius are in the process of establishing such facilities.

34. As mentioned in the earlier chapters, currently most of the exports from Africa consist of unprocessed and semi-processed raw materials. Manufactured and capital goods form only a small portion of their exports. Consequently a large portion of such exports are sold either against cash or on a short-term credit basis. Even then exporters require finance to cover the working capital in the interim period between the receipt of the order and the time of the shipment of the cargo to cover the expenses on procuring the raw material, packing, transport and other handling costs. The exporter requires finance both at pre-shipment and post-shipment stages depending on his requirement. Whereas pre-shipment financing is needed as working capital, post-shipment financing is necessary when the exporter extends credit to an overseas buyer. In developed and in some developing countries pre-shipment financing covering up to 80 to 90 per cent of the value of export orders is generally provided by the commercial banks at a preferential rate of interest. For post-shipment finance, whether for the short-term, medium-term or long-term, is provided by commercial banks and/or specially established banks such as the United States Export-Import Bank (EXIMBANK), Export-Import Bank of Japan, Inter-American Development Bank (IDB) in Latin America, Latin American Export Bank (BLADEX), Industrial Development Bank of India (now EXIM Bank of India), the Islamic Development Bank in the Middle East, etc. For example, the functions of the EXIM Bank of India are to provide financial assistance to exporters and importers and to function as the principal financial institution for co-ordinating the working of institutions engaged in financing export and import of goods and services with a view to promoting the country's international trade. Besides extension of suppliers' and buyers' credits, overseas investment and pre-shipment finance, the EXIM Bank will also finance consultancy and other services, leasing of equipment, assisting joint ventures in third world countries, etc.

35. The banking system in Africa, unlike other developed and developing countries, is not well-organized and most of the banking facilities are concentrated in major cities and towns. The majority of the population,

living in rural areas, face the problem of finance for agricultural production, which is still the major foreign-exchange earner. Moreover, banks are generally reluctant to extend export credit, particularly to new and small exporters, without adequate tangible securities, even when export orders are backed by letters of credit. A number of exporters are unable to take more export orders in the absence of adequate bank finance even though they have the necessary capacity to execute them. This difficulty besets more acutely those exporters whose contracts are not backed by letters of credit.

36. Although export is treated as a priority sector in the entire region of Africa, the banking system is not geared to financing exports. The banks apply normal banking conditions for any lending for export credit. Pre-shipment and post-shipment finance can be obtained by the exporters only within their overall limit of overdraft arrangements with the bank. No extra accommodation for export is given by the banks either to an established exporter or a newcomer. Nor do African countries have financial institutions other than commercial banks to provide export finance, such as factors, acceptance houses and others that are common developed countries. Thus, effective export growth is hindered by inadequate institutional support.

37. Exporters in some African countries, such as Kenya, are allowed export compensation, drawback of duty and refund of sales tax on certain goods exported from their countries. These facilities and incentives are available to the manufacturer-exporter only after the receipt of foreign exchange. The time gap between the actual shipment and receipt of payment can be as long as 180 days. These benefits are taken into account by the exporter while quoting his price to the foreign buyer. Banks in Africa do not sanction advances towards such receivables, with the result that the exporter is not in a position to get accommodation from his bank. This adversely affects the working capital of the exporter and consequently his export capacity.

38. Currently, many banks do not issue performance bonds on behalf of the exporter in connection with bid bond or his export performance. When they do so, it is only after obtaining 100 per cent security or insisting on various types of securities, including cash deposits or cash margins.

VII. EXPORT CREDIT GUARANTEE SCHEMES

39. With a view to alleviating the problems of the exporter in connection with the pre-shipment and post-shipment finance it is necessary to establish adequate financing and refinancing schemes at the national, sub-regional and regional level in Africa. In particular, African countries should seriously consider setting up export credit guarantee organizations to enable their commercial banks to act as effective instruments of trade promotion by providing sufficient finances to the manufacturer/producer/exporter for execution of their export orders. Specifically the functions of the Export Credit

Guarantee Schemes would be two-fold, viz:

- (i) to provide export credit insurance policy;
- (ii) to provide financial guarantees to the banks.

A. Export credit insurance

40. Export credit insurance is basically insurance to the exporter against the possibility of non-receipt of payments against exports made on credit terms. Such risks may arise due to the failure or the inability of the foreign buyer to pay or to non-commercial or political reasons such as a ban on transfer of funds because of payments difficulties in the buyer's country, war, civil disturbances and so on. Other risks may be insolvency of the buyer, default by the buyer to make payment, repudiation of the contract, exchange fluctuation or devaluation risks, etc. The type and extent of risks covered by export credit guarantee organizations differ from country to country. However, the practice of all the countries conforms to two basic principles, namely:

- (a) Except in the case of some pre-shipment risks, only those risks are covered which arise from events occurring outside the exporter's country;
- (b) Only those risks are covered which are outside the control of the exporter and generally of the buyer. Any risk which can be avoided by the exporter and/or the buyer is excluded, such as risks of fire, theft or marine risks, for which adequate coverage is available from general insurance companies. All risks which contravene the above principles or for which cover is available from other insurers are generally excluded.

41. An export credit insurance policy will assist an exporter in obtaining funds readily from his bank. Such a policy will provide useful collateral to an exporter to obtain finance.

B. Financial guarantee schemes

42. Some export credit insurers, particularly in developing countries, have gone beyond the functions described above and have evolved other instruments called bank guarantees or financial guarantees issued to banks financing exports. The guarantees assure the availability of the required credit facility to the exporter from his bankers. These guarantees, which cover the risk of losses to banks arising from failure of their exporter-clients to pay back advances, are of different kinds.

(a) Pre-shipment credit guarantees

43. Certain countries, such as India, the Republic of Korea and

Pakistan, offer pre-shipment guarantees as part of their export credit insurance programmes. The Export Credit Guarantee Corporation of India issues packing credit guarantees to banks covering pre-shipment advances. The packing credit guarantee is designed to indemnify the banks during the pre-shipment stages against a percentage of the loss suffered by them on advances made for the purchase, manufacture, processing and packaging of goods meant for exports against a firm contract for sale, whether supported by a letter of credit or not. The guarantee can be issued to cover requests for individual advances as well as to provide cover up to a specified limit for packing credit advances given to an exporter on a revolving basis over a period of time, normally one year. The Export Credit Guarantee Corporation of India also offers to banks its packing credit guarantees in a "whole turnover" form. Under this arrangement, a bank obtains a single guarantee covering all pre-shipment advances to all its exporter-clients. This system brings a large volume of business to the export credit insurer and, more important, it gives a wide spread of risks, as the bank has to cover advances to its most creditworthy clients as well as to more risky clients under the blanket guarantee. In addition, some schemes also provide guarantees for small exporters and for export production.

(b) Post-shipment credit guarantees

44. Many export credit insurers offer a guarantee to banks covering the post-shipment credit they extend to exporters holding export credit insurance policies. In fact the post-shipment credit guarantee is supplementary to the insurance policy, and is an unconditional guarantee to the bank. Under this guarantee, losses of the bank are covered on any advances extended to an exporter at the post-shipment stage by way of purchase, discount or negotiation of export documents. One of the conditions for issue of this guarantee is that the exporter on whose account the bank seeks the guarantee holds the insurance policy for covering the post-shipment risks.

(c) Export finance guarantee

45. Sometimes banks advance credits to exporters for the amount to be received by the exporters as export compensation, drawback of duties, rebates and so on from the government after the shipment of goods. In order to protect the bank which has offered finance against these receivables to the exporters, certain export credit insurers provide a guarantee to banks called an "export finance guarantee". This guarantee is available only for individual accounts and not in a whole turnover form.

(d) Export performance guarantee

46. In addition to finance guarantees, certain credit insurers also offer export performance guarantees to banks which, in turn, have issued

performance guarantees on behalf of their export-clients. Banks issue performance guarantees on account of their exporters in such situations as bid bonds, performance bonds, maintenance bonds, et.

47. The above is an outline of an export credit guarantee scheme which may be modified to suit the needs of a particular country. Realizing the importance of finance for exports, it is recommended that this scheme should be instituted by African countries on a priority basis. As there is little experience in the region for operating such a scheme, the assistance and know-how from other developing countries as well as developed countries may be necessary. A model of the scheme might be circulated to the countries in the African region by UNCTAD, or by the United Nations Economic Commission for Africa.

VIII. A TRADE AND DEVELOPMENT BANK

48. The establishment of an export credit guarantee scheme will help the exporter to obtain mainly short-term credit from the banks. In the long run, as Africa reaches that level of development at which it begins to export capital equipment, machinery and turn-key projects, its exporters will require medium-term and long-term credits from the banks. The export structure of Africa will gradually change from primary goods to manufactured products and ultimately capital equipment and machinery. Capital equipment and machinery are the main categories of goods generally exported under medium-term credit, which usually covers a period of from one to five years, while turn-key projects and export of complete industrial plants are normally sold under long-term credit extending beyond five years.

49. Exporting on deferred payment terms, particularly in the case of medium and long-term credits, where the production will require components and intermediate goods imported either on a cash or on a short-term credit basis, will create problems for the exporting countries with regard to their external financing and balance of payments. Most countries in the African region are net importers of capital and it would be difficult at the national level to grant export credits which would result in export of capital and outflow of foreign exchange for the time being. Moreover, paucity of foreign exchange in many countries of the region places heavy constraints on the lending abilities of commercial banks and ultimately of the exporter to compete with their counterparts in terms of exports.

50. The provision of medium and long-term export credit will delay the inflow of foreign exchange, affect the balance of payments adversely and reduce the ability of national credit systems to offer export credit facility. The alternative, in the absence of a sub-regional or regional trade financing mechanism, is to discount the export bills in the international capital markets. This method may not be very satisfactory for the developing African countries because the discounting of export bills in the international capital markets normally takes place at commercial rates based on the London Inter-Bank Offered Rate (LIBOR).

This will make the financing very expensive. Besides it will be difficult for some countries to gain access to the international capital markets without adequate guarantees.

51. On the one hand, export of capital goods and manufactures from many African developing countries are not large enough to warrant the establishment of a self-supporting export finance institution at the national level; on the other hand, in the absence of such facilities, exporters find it difficult to obtain export credits from commercial banks.

52. It is generally agreed that the success of the efforts of the African developing countries to promote exports of their manufactures will depend to a large extent upon the creation of adequate national, sub-regional and regional financing facilities which will greatly strengthen the competitive ability of their exporters. But, taking into consideration the limitation of funds and manpower, it would be more appropriate to set up a trade and development bank in the eastern, southern and central African countries to fill the gap.

Objectives and functions of the proposed trade and development bank

53. The report of the Joint Study Team on the establishment of a sub-regional trade and development bank for eastern and southern Africa made by the Economic Commission for Africa in October 1981 has suggested the following objectives for the proposed bank:

- (i) To promote the general economic and social development of sub-regional member States, taking into account the prevailing economic, social and other related conditions within the Preferential Trade Area (PTA);
- (ii) To promote the investment of public and private capital for development purposes;
- (iii) To promote the establishment of national development finance institutions;
- (iv) To develop and stimulate trade between and among the countries of the sub-region;
- (v) To support and supplement the activities of national financial institutions which cater to the needs of the exporter and export-oriented industries;
- (vi) To mobilize resources from domestic and external sources for the operation of the bank.

54. In order to achieve the above objectives, the following functions are suggested for the proposed bank:

- (i) To provide financial assistance in respect of the trade within the Preferential Trade Area (PTA) through the granting of necessary credits and guarantees;
- (ii) To grant loans for and invest in enterprises that would promote trade within the PTA;
- (iii) To accept, discount, rediscount and endorse the trade bills of commercial banks, central and development banks and other national financial institutions of the member States for the purpose of promoting trade within the PTA;
- (iv) To assist in the establishment of export development banks and export credit guarantees and insurance facilities within the region and participate in the equity capital of national export credit guarantee and insurance institutions and provide them with technical assistance as necessary;
- (v) To assist enterprises in the member States, particularly the small and medium-sized enterprises engaged in export trade within the PTA, in the preparation of projects for financial assistance from the bank;
- (vi) To provide export credit guarantee facilities where such facilities do not exist. Issue guarantees such as bid bonds, advance payment guarantees, performance guarantees to importers on behalf of exporters for the purpose of sub-regional trade;
- (vii) To provide information on the credit standing of the buyers;
- (viii) To train personnel of national financial institutions in the field of export financing;
- (ix) To provide information on a regular basis to the export sector about export incentives and procedures, export finance facilities, etc.

55. The bank's functions in the field of development finance would include the financing of projects and programmes relating to economic development, strengthening of national development financial institutions, assistance in project formulation, etc. 11/

56. The proposed bank should also facilitate and finance intra-African government purchases. When the government of a member country has floated tenders for purchases, the bank should communicate the information on an urgent basis to all the members and, as a matter of policy, the purchasing government should give priority for import from an African country. If the purchases are made on a credit basis, the bank should finance such deals. This would stimulate the development of intra-regional trade.

57. The resources required for the proposed bank, financial viability,

borrowing and lending policies and the organization and management of the bank should be worked out in detail. The experience of other similar organizations operating in other countries or regions may be taken into account in order to avoid any problems in its operation. Serious consideration should be given by the international community, especially in the context of economic co-operation among developing countries, to assist in the establishment of this bank. The bank will be an apex organization in extending medium and long-term credits to exporters. As already mentioned, many other regions and countries have set up specialized institutions to finance exports of capital goods and manufactures at a regional level. The Inter-American Development Bank (IDB) and the Andean Development Corporation (CAF) in the Latin American region, the Islamic Development Bank for Islamic countries are some of the outstanding examples where facilities have been instituted for financing exports of their member countries. However, in many other areas, such as the African continent, no mechanisms are available and there remains an urgent need for devising a new facility to provide medium-term and long-term financing for the expansion of trade among developing countries with particular attention to those which face obstacles in raising money in the financial markets. A similar organization covering the eastern and southern region of Africa will go a long way in boosting exports from the region of high value-added manufactured products. The establishment of a sub-regional trade and development bank, in line with the Mexico City mandate, specializing in the mobilization of international resources and financing of trade has substantial merit and deserves full consideration within the overall context of encouraging financial co-operation among developing countries.

IX. INTERNATIONAL EXPORT CREDIT GUARANTEE FACILITY

58. It is an accepted fact that the ability of developing countries to grant medium and long-term export credits on terms competitive with those offered by developed countries is limited owing to foreign-exchange constraints which make any postponement of foreign-exchange earnings a heavy burden on the economy. In view of this difficulty, and in order to contribute to the development of non-traditional exports of developing countries, it has been proposed that an international export credit guarantee facility be set up, which would provide its guarantee to export credit paper arising from exports on credit by developing countries. This guarantee would enable these countries to rediscount their export credit paper on favourable terms in international capital markets.

59. The facility might have other functions which should be consistent with its principal role as a guarantor and which aim at promoting the growth and development of international trade in developing countries. It could, for example, help the exporting country to overcome some of the obstacles that might be encountered in placing the guaranteed export credit paper, by helping to arrange the refinancing of such paper in international capital markets.

60. The facility could guarantee export credit paper - i.e. promissory

notes, bills and similar negotiable instruments of payment arising from export on credit of developing countries - so as to improve the marketability of such paper on international capital markets. Both buyers' and suppliers' credits should be eligible for guarantee.

61. Since UNCTAD is already considering the above proposal it is not necessary to go into details of its operational features. Suffice it to say that the scheme should be instituted as early as possible so that the developing countries can achieve the goals of higher exports which they invariably set in their development plans.

X. SUMMARY AND CONCLUSIONS

62. The present international economic environment confronts the developing countries with many unfavourable factors. The sluggish growth rate in the export of their major products and commodities, weakening terms of trade, declining prospects for official development assistance, the high cost of borrowing in the capital markets and large repayment obligations, have made the developing countries vulnerable. The visible and invisible trade barriers erected by the developed countries against the imports of simple manufactures and semi-manufactures from the developing countries, as well as their policy measures to combat inflation and overcome recession and high unemployment, have further compounded the problems of developing countries, particularly in the African continent. The successive two international development strategies and half-hearted implementation of the measures suggested at various international fora for alleviating the problems of developing countries have not made any material change to the rate of growth in the GDP of the developing countries. The GDP of Africa in the last two decades (1960-1980) has remained stagnant at 4.8 per cent. If the rise in population is taken into account in the continent, for some countries there will be a negative rate of growth.

63. Although Africa possesses vast resources of various scarce minerals such as uranium, platinum, lead, copper, manganese ore, nickel, soda ash, it still remains the least developed continent in the world. It has 20 of the 31 least developed countries classified by the United Nations.

64. The share of Africa in international trade is very small and has remained stagnant at below 5 per cent during the last 17 years. The developed market-economy countries account for more than three-fourths of Africa's imports and exports. Intra-Africa trade and trade with other developing countries has remained at a low level. For example, Africa's trade with other developing countries amounted to only 13.4 per cent of its total trade in 1980. Similarly, intra-African trade has been at a low volume amounting to 4.6 per cent only. In the developed countries, the EEC is the principal trading partner for most of the countries in the region, while South Africa is the main buyer and supplier for some countries in the southern region.

65. The low volume and uneven pattern of intra-regional trade has been largely due to lack of complementarity in the production structure of different economies. The general pattern of production and trade in the region is, by and large, similar to that of other developing countries: for most countries exports consist mainly of agricultural and mineral products and imports of oil, foodstuffs, machinery and equipment and consumer goods. Most of the countries in the region are dependent on export of one or two commodities for earning a major portion of their foreign exchange. For example, more than 40 per cent of Kenya's exports consist of coffee and tea, 88 per cent of Zambia's exports of copper, 67 per cent of Mauritius' exports of sugar, 85 per cent of Uganda's exports of coffee, and so on. One or two commodities account for at least one-half of exports for 13 of the 16 countries in the eastern and southern African sub-region.

66. The over-dependence of African countries on exports of one or two commodities for earning a bulk of their foreign exchange earnings is fraught with serious consequences. With the erosion in demand for these commodities or the increase in supply come sharp price fluctuations which adversely affect the foreign-exchange earnings of these countries. As a consequence, both the producers as well as the government suffer by way of decreased earnings. The volatile nature of primary commodities has serious repercussions on the foreign exchange budgeting of these countries. The example of coffee, where the international prices declined sharply in 1979 and 1980 as compared to 1976 and 1977, which thwarted all forward planning of the main producing countries, is still fresh in the minds of planners. Apart from violent fluctuations and the downward price trends faced by the primary commodities forming the bulk of Africa's exports, it is a well-known fact that these exports develop only weak linkages. Development needs, therefore, dictate that African countries should develop their exports of manufactures and semi-manufactures, which have more stable and rapidly expanding markets and which are capable of forging strong industrial linkages.

67. A realistic way towards the diversification of the exports of African countries from their excessive dependence on primary commodities to manufactured goods is through accelerated growth of intra-African trade and trade with other developing countries. However, intra-regional trade expansion in Africa is hamstrung with various constraints, such as lack of export culture, the small size of production, differences in the currency system, absence of well-developed infrastructure and services - such as banking, insurance, credit facilities, payments system - multiplicity of currencies and their non-convertibility, and inadequate transport and communications systems. The African situation therefore demands an integrated programme of activities in the field of trade promotion, market research, credit facilities, financial and monetary policies.

68. It was against this background that a new African strategy in the field of international trade and finance was adopted by the African Heads of State and Government of the Organization of African Unity (OAU) in Lagos during the Second Extraordinary Session of the Assembly, which was exclusively devoted to the economic problems of Africa. The Assembly

reiterated, among other things, the need to expand and promote closer economic relations not only at the intra-Africa level but also with countries in other developing regions. It is, therefore, necessary to underscore once again the importance of this development, which is in line with the programme for collective self-reliance adopted in various fora of the Group of 77.

69. It has been generally recognized that schemes for trade expansion among developing countries, particularly among African countries, should be supported by a number of concerted monetary and financial measures including multilateral payments and clearing arrangements, trade financing facilities and capital and financial flows. Various aspects of economic and financial co-operation among developing countries have been discussed at length at the meetings of the Group of 77 held at Mexico City, Arusha and Caracas. Numerous suggestions and proposals have been made in the Final Report of the High-Level Conference on Economic Co-operation Among Developing Countries, held at Caracas in May 1981, in respect of financial co-operation among the developing countries. Among these, the following are of immediate concern to the African region:

- (i) Regional payments and clearing arrangements;
- (ii) Export credit guarantee schemes;
- (iii) A trade and development bank;
- (iv) International export credit guarantee facility.

70. Different countries in Africa have pegged their exchange rate in terms of certain currencies or a basket of currencies. For example, while the currencies of Kenya, Uganda and Zambia are pegged to the SDR, Botswana and the United Republic of Tanzania pegged their currencies to a basket of currencies. The U.S. dollar serves as the intervening currency for 12 countries, the French franc for two countries and the pound sterling for another two countries. Although the various practices of pegging the currencies have posed no serious problem for intra-regional settlements, it would facilitate trade payments if the pegging policy were harmonized.

71. Barter trade or the mechanism of bilateral payments agreements have not been used extensively in Africa. There is only one major instance of a bilateral payments agreement - i.e. between Mozambique and the United Republic of Tanzania - under which all payments between the two countries are settled through clearing accounts maintained by the respective central banks and no settlements are effected in convertible currency.

72. A number of international banks have branches or subsidiary relationships in Africa. Most payments for intra-regional trade are channelled through these banks and settled in convertible currencies. However, certain central banks in the region have established reciprocal

accounts on a bilateral basis with other central banks in the region. For example, reciprocal accounts are now maintained between the central banks of Kenya and Zambia; Swaziland and the United Republic of Tanzania; Swaziland and Uganda; Ethiopia and the United Republic of Tanzania; Somalia and Uganda; and Malawi and Swaziland. Balances in these accounts are used for import of goods and services, for transfer to other external accounts and for purchase of foreign exchange. The maximum and minimum limits of reciprocal accounts have been fixed by the countries concerned in accordance with the volume of trade.

73. In spite of these reciprocal accounts both intra-regional and international trade are invoiced and settled in convertible currencies. Among the convertible currencies, the U.S. dollar and the pound sterling are the main trading currencies, accounting for 60 to 85 per cent and 10 to 45 per cent respectively in the various countries. Trade is also conducted in French francs in the countries that have strong French connections.

74. Already some regional payments and clearing arrangements are in operation in the developing countries. In Africa there is a West African Clearing House. In eastern, central and southern Africa, there is no such facility in operation at present. There is, therefore, a strong case for instituting such a facility in these regions. The advantages of setting up sub-regional multilateral clearing arrangements are many. For example, under such a facility the working balances in convertible currencies held by each country could be reduced, since convertible currencies would be used only for settlement of net balances at the end of each settlement period. In fact, deficits with one country or a group of countries will be offset by surpluses with others. The clearing arrangements will lead to savings in the cost of effecting intra-regional settlements that will accrue to individual businessmen. Payment of fees and commissions charged by bankers will also be saved. The clearing facility will instil greater confidence among businessmen in the sub-regional payment system and will thereby encourage the conduct of trade by other less costly methods of payment than the expensive method of a letter of credit. The sub-regional clearing facility would also promote the use of regional currency which will finally result in savings in the cost of settlement.

75. In order to ensure that a clearing facility works satisfactorily, it is essential that it be set up on the basis of a scientific study and should have features which are common to such schemes in other parts of the world. If there are any hurdles and bottlenecks faced by clearing facilities in other countries, these should be examined and avoided in the new facility proposed to be set up in eastern and southern Africa and in central Africa. With this in mind, the clearing facility should have the following salient features:

- (i) All countries in the region should join the scheme to ensure its success;
- (ii) Capital transactions between different countries of the region should be excluded from the scope of the facility;

- (iii) Among trade and related transactions exceptions should be minimal;
- (iv) Payments related to supply of petroleum and petroleum products should be excluded;
- (v) The clearing facility should post debt and credit items to reflect transactions among members in a unit of account acceptable to the parties concerned;
- (vi) Invoicing of transactions should be either in the unit of account or in one of the trading partner's currencies, at the option of the businessmen;
- (vii) There should be a provision that, in the event of an exchange-rate adjustment, all outstanding claims would be settled among participating members at the previous exchange rate. In the long run, adoption of a common currency or basket for pegging should be considered. The region's currencies should be adapted to facilitate exchange-rate stability between the regional currencies;
- (viii) In the proposed clearing facility, limits should be placed on each participant's net creditor or debtor position with a view to enabling only settlements up to those amounts to be positioned to the end of the interim period between settlement dates. If a member's net debtor position exceeds the pre-agreed limit, the country should be required to pay the excess in convertible currency to the net creditors and vice versa;
- (ix) In order to generate confidence among businessmen and banks, a provision should be included in the scheme whereby individual payments channelled through the clearing facility are backed by the guarantee of the central bank or the government of the member country.

76. Many developed and developing countries have adopted export credit and export credit insurance schemes as a major sales promotion technique. In Africa, Zimbabwe is the only country which has introduced such a scheme. An exporter requires finance both at pre-shipment and post-shipment stages depending on his requirements. Whereas the pre-shipment financing is needed as working capital, post-shipment financing is necessary when the exporter extends credit to an overseas buyer. In developed countries and some developing countries pre-shipment financing up to 80 to 90 per cent of the value of the exporters' orders is generally provided by the commercial banks. For post-shipment finance, which is generally of medium and long-term duration, specialized institutions have been set up, such as Export-Import Banks in the United States of America, Japan and India; Inter-American Development Bank (IDB) and Latin American Export Bank (BLADEX) in Latin America; the Islamic Development Bank in the Middle East, etc. As exports of manufactured and semi-manufactured goods, machinery and capital equipment from Africa begin to grow, a similar mechanism will be necessary in Africa.

77. The banking system in Africa is not well-organized and most of the banking facilities are concentrated in major cities and towns. Moreover, banks are generally reluctant to extend export credit, particularly to new and small exporters, without adequate tangible securities, even when export orders are backed by letters of credit. A number of exporters are unable to accept more export orders in the absence of adequate bank finance even though they have the necessary capacity to execute them. Although exporting is treated as a priority sector throughout Africa, the banking system is not geared to financing exports. The banks apply normal banking conditions for any lending for export credit. Export credit can be obtained by the exporters only within their overall limit of overdraft arrangements with the bank. No extra accommodation for exports is given by the banks. Nor do African countries have financial institutions other than commercial banks to provide export finance, such as factors, acceptance houses and others that are common in many developed countries. Thus effective export growth is hindered by the inadequate institutional support.

78. With a view to alleviating the exporter's problems with pre-shipment and post-shipment finance it is necessary to establish adequate financing and refinancing schemes at the national, sub-regional and regional levels in Africa. In particular, the African countries should seriously consider setting up export credit guarantee schemes to enable their commercial banks to act as effective instruments for trade promotion by providing sufficient finance to the manufacturer/producer/exporter for the execution of their export orders. Specifically, the functions of the export credit guarantee schemes should be two-fold, namely: (i) to provide export credit guarantee insurance policy, and (ii) to provide financial guarantees to the banks. There are various types of guarantees which export credit guarantee corporations would provide to the banks to enable them to grant export finance to the shipper.

79. The establishment of an export credit guarantee scheme would help the exporter to obtain mainly short-term credits from banks. In the long run, as Africa reaches the level of development at which it starts to export capital goods, machinery and turn-key projects, its exporters will require medium-term and long-term credits from the banks. However, the provision of medium and long-term export credit will delay the flow of foreign exchange, affect the balance of payments adversely and reduce the ability of national credit systems to offer export credit facility. Moreover, exports of capital goods from Africa are not at present large enough to warrant the establishment of a self-supporting export finance institution at the national level. Thus, taking into account these limitations, it would be more appropriate to set up a trade and development bank on a sub-regional basis in Africa. To begin with, such a bank should be established for the eastern, central and southern African countries.

80. Under the aegis of the Economic Commission for Africa a Joint Study Team on the establishment of a sub-regional and trade and development bank for eastern and southern Africa was appointed in 1981. The Joint Study Team has submitted a detailed report suggesting the creation of

such a bank with the objective of promoting the general economic and social development of sub-regional member States, by providing financial assistance in respect of trade within the Preferential Trade Area (PTA) through the granting of necessary credits and guarantees. The bank would accept discount, rediscount and endorse the trade bills of commercial banks, central and development banks and other national financial institutions of the member States. The bank would also facilitate and finance the intra-African government purchases. When a government of a member country floats tenders for purchases, the bank would communicate the information to all members and, as a matter of policy, the purchasing government should give priority to imports from an African country. This would stimulate expansion of intra-regional trade. The objectives, functions and resources required for the proposed bank, as well as its financial viability and borrowing and lending policies, should be worked out in detail. Serious consideration should be given to the establishment of such a bank in the context of economic co-operation among developing countries. The bank would be an apex organization in the region to assist its members to create facilities for extending export finance to their exporters. The experience of other countries or regions which have set up similar institutions should be taken as a guide.

81. UNCTAD is considering a proposal for setting up an international export credit guarantee facility with a view to providing guarantees to export credit paper arising from exports on credit by developing countries. This guarantee would enable these countries to rediscount their export credit paper on favourable terms in the international capital markets. It could also help the developing countries to overcome some of the obstacles that might be encountered in placing the guaranteed export credit paper, by helping to arrange the refinancing of such paper in international capital markets. As this facility will be of immense assistance to the developing countries, it is suggested that it should be set up as early as possible.

82. In the initial period the developing countries in Africa should devote their attention to the implementation of the above four proposals. In this paper, guidelines for setting up an institutional framework for monetary and financial co-operation among the developing countries have been suggested. It is for the countries concerned to work out the operational details according to their requirements. As exports from the African region grow in size and content and as more manufactured goods begin to figure in their export catalogues, the other suggestions contained in the Final Report of the High-Level Conference on Economic Co-operation Among Developing Countries should be considered.

FOOTNOTES

1. Trade and Development Report, 1981 (TD/B/863/Rev.1) (United Nations publication, Sales No. E.81.II.D.9).
2. World Bank, External Debt Division, Economic Analysis and Projection Department, World Debt Tables, Vol.II - EC 167/80 October 1980.
3. Trade and Development Report 1981, UNCTAD.
4. IMF, "Payments arrangements and the expansion of trade in eastern and southern Africa" (DM/81/74).
5. Lagos Plan of Action for the Economic Development of Africa 1980-2000.
6. The 12 countries are: Botswana, Djibouti, Ethiopia, Kenya, Lesotho, Malawi, Somalia, Swaziland, Uganda, the United Republic of Tanzania, Zambia and Zimbabwe. The French franc countries are the Comoros and Madagascar and the pound sterling countries are Mauritius and the Seychelles.
7. For details see IMF, "Payments arrangements and the expansion of trade in eastern and southern Africa" (DM/81/74).
8. Information based on discussions with the Central Bank of Kenya.
9. The West African Clearing House was established in 1975. It began its operations in 1976 with a view to handling direct payments between its nine member central banks to promote trade and currency transactions. Its members are Banque Centrale des Etats de l'Afrique de l'Ouest (serving Benin, Ivory Coast, Niger, Senegal, Togo and Upper Volta) and the central banks of The Gambia, Ghana, Guinea-Bissau, Liberia, Mali, Nigeria and Sierra Leone.
10. Under the clearing facility, the exporter would be reimbursed by his bank upon presentation of valid documents. Subsequently the exporter's bank would obtain reimbursement from its central bank which would receive a credit by the clearing facility through debit to the account of the importer's central bank. The latter would be reimbursed by the importer's commercial bank and ultimately by the importer himself. It would be necessary to work out the procedure precisely, in order to ensure that the exporter is paid in local currency as promptly as under normal commercial practice.
11. For details, see the report of the Joint Study Team on the establishment of a sub-regional trade and development bank for eastern and southern Africa (ECA/MULPOC/Lusaka/PTA/x/3), 18 September 1981.

SOME IDEAS ON FINANCIAL AND MONETARY CO-OPERATION AMONG DEVELOPING COUNTRIES

Salvador Arriola*

INTRODUCTION

1. The new demands for a restructuring of the world economy have brought about changes in relationships between the developed and the developing countries, and between the developing countries themselves.

2. In this connexion, economic co-operation among developing countries (ECDC) must be considered as a fundamental means of action to promote a balanced and equitable process of world economic development. Such co-operation is one of the most significant factors for the establishment of the New International Economic Order.

3. The concept of economic co-operation among developing countries (ECDC) is a relatively recent one. During recent decades, developing countries have adopted a series of important measures to strengthen such co-operation, mainly at the regional and sub-regional levels, within a framework of economic integration and other regional co-operation schemes.

4. The concept of South-South co-operation has gained in importance during recent years thanks to a series of programmes of action and declarations issued by developing countries relating to measures and commitments aimed at strengthening and expanding the co-operation links among themselves.

5. This document briefly summarizes the proposals made by the Group of 77 on several occasions in connexion with South-South co-operation. This is followed by a general evaluation of the programmes of financial and monetary co-operation among developing countries. Thirdly, it proposes a programme of immediate action for financial and monetary co-operation among developing countries which attempts to assign priorities to the various actions that might be devised by the Group of 24.

6. Lastly, at the institutional level, it proposes a timetable to co-ordinate the activities of the Group of 77 and the Group of 24 in order to implement this programme.

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Chapter I

ECONOMIC CO-OPERATION AMONG DEVELOPING COUNTRIES

A. The Group of 77

7. The subject of economic co-operation among developing countries (ECDC) became important to the international community at the Third Ministerial Meeting of the Group of 77, held in Manila in January and February 1976, when the developing countries agreed on the Manila Programme of Action and on resolution 1 which contains a programme for economic co-operation among developing countries.

8. The Manila Programme of Action proposes mechanisms to strengthen economic co-operation among developing countries and emphasizes strengthening the role of UNCTAD. In this respect, the establishment of a Committee on Economic Co-operation among Developing Countries was proposed. Its function would be to examine measures to provide timely and adequately-structured support and aid to the developing countries in order to strengthen and expand their mutual co-operation at the sub-regional, regional and inter-regional levels.

9. In the resolution on ECDC, it was decided to approve a programme of economic co-operation among developing countries, while at the same time indicating the main areas and methods of action.

10. In the course of UNCTAD IV, the Conference adopted, without dissent, resolution 92 (IV) concerning support measures from the developed countries and international organizations for the programme of economic co-operation among developing countries.

11. Resolution 92 (IV) calls on the developed market-economy countries, the socialist countries of Eastern Europe and the United Nations system to provide their support and aid to the developing countries, on request, in order to strengthen and expand their mutual co-operation.

12. To this end, the industrialized countries have committed themselves to refrain from adopting any type of measures that might have a negative effect on ECDC programmes, and to support and facilitate their execution.

13. Furthermore, the resolution called on international financial institutions to offer maximum support to the ECDC programme, and stated that UNCTAD should strengthen its capacity to provide technical assistance to developing countries so they may promote and execute their ECDC programmes and that UNDP should devote a greater part of its technical assistance funds to such countries for the same purpose.

14. Agreement having been reached on the formal framework, the Group of 77 has tried to carry out the main principles and ideas which have been endorsed during these initial years by members of the international community at several important political conferences. Prominent among such conferences have been, for example, the Conference on Economic Co-operation among Developing Countries (Mexico City, 1976), 1/ the Fourth Ministerial Meeting of the Group of 77 (Arusha, 1979), 2/ the fifth session of UNCTAD (Manila, 1979) 3/ and the High-Level Conference on Economic Co-operation among Developing Countries (Caracas, 1981). 4/

B. The Group of 24

15. In September 1979, the Group of 24 held a Ministerial Meeting in Belgrade, Yugoslavia, during which the outline of a programme of action on international monetary reform was agreed on and endorsed by the Group of 77. In its chapter on elements for the future work programme of the Group of 24, this document reaffirms the importance of monetary and financial co-operation among developing countries, considering it an integral part of the process of change in the international monetary and financial order. Moreover, the Group of 24 announced that it would seek ways and means of contributing to the development of specific mechanisms through which such co-operation between developing countries might be implemented, in the light of the ECDC programmes adopted by the developing countries and on the basis of their own initiatives.

16. The twenty-third Ministerial Meeting of the Group of 24 was held in Washington D.C. in September 1981. At this meeting, the Ministers welcomed the final report of the Caracas High-Level Conference on ECDC, which had been transmitted by the President of the Group of 77 in New York. They emphasized the importance of establishing close co-ordination in this field between developing countries, as exemplified in Latin America by the Santo Domingo Agreement.

17. The Ministers stated that, following the Belgrade instructions from the Group of 77, they would consider carefully the document's recommendations concerning financial and monetary co-operation among developing countries.

Chapter II

COMMENTS ON, AND GENERAL EVALUATION OF, PROGRAMMES OF FINANCIAL AND MONETARY CO-OPERATION AMONG DEVELOPING COUNTRIES

18. In recent decades, the various modalities of ECDC have been analyzed and negotiated, but these efforts have yielded little fruit. Experience in this field suggests that co-operation has been the most successful at the sub-regional and regional levels, where programmes have actually been implemented. But large-scale programmes involving all the developing countries have not been carried beyond the descriptive stage.

19. In this regard, it should be noted that the four ECDC programmes formulated at the Group of 77 meetings at Manila, Mexico City, Arusha and Caracas have not been put into practice.

20. Within these programmes, it was the monetary and financial components that caused the greatest tension at the negotiating stage. As a consequence, the relevant sections are the most vague and contain the fewest commitments.

21. In the Caracas ECDC document of May 1981 there is an absence of specific monetary and financial commitments. Some recommendations are included which pertain to consideration of proposals such as the establishment of a bank for developing countries and the solidarity fund for the economic development of the non-aligned countries. Moreover, the problem of sectoral co-operation among developing countries is approached, but without mentioning the financial conditions that would apply specifically to each sector. The financial aspects are grouped together in a single section lacking specific commitments and, in addition, are dissociated from the sectoral approach that permeates the whole document.

22. In fact, the proposals included result from prior commitments (from the Fourth Ministerial Meeting of the Group of 77, Arusha, 1979, and the Sixth Summit Meeting of the Non-Aligned Countries, Havana, 1979) that are considered as a compromise formula in the Caracas document. Furthermore, implementation of these proposals would entail a long and complex process of study and negotiation and would accordingly be very difficult.

23. In short, the financial section of the Caracas document lacks practical recommendations that could be applied in the short term. Moreover, it fails to include financial supports specifically designed for sectoral development, a factor which greatly weakens the programme as a whole.

24. The monetary and financial schemes within the ECDC framework have not crystallized clearly because they insist on recommending large-scale projects which are not always commercially feasible. If these ideas were more economically feasible and more oriented towards the regional and sub-regional levels, results would probably be more satisfactory.

25. It is evident that developing countries with a current-account surplus would channel their funds for investment directly to other such countries if due consideration was given to the vital interest which the former have in protecting the value, security and yield of their financial assets. Their relative dependence on this return will increase with time and to the extent that non-renewable oil reserves decrease. Obviously, diversification reduces the risk factor and should therefore be encouraged.

26. The negotiating power of the developing countries with a capital surplus and those which are importers of capital is weak vis-à-vis the capital markets of the developed countries. This position could be altered with the emergence of direct links that would constitute an alternative mechanism. In the design of such links the mistake of adopting purely aid-oriented attitudes should be avoided. Institutional progress should clearly be seen to benefit all the parties concerned. Nevertheless, the existing concessionary financial arrangements must be continued for as long as it is possible to channel additional financing on concessionary terms reflecting the elimination of several intermediaries.

27. It would be advisable to concentrate short-term and long-term efforts on a number of proposals that could be put into practice within a relatively short time, but one must not forget the need to press other large-scale projects such as the establishment of multilateral financial institutions which should form part of the efforts of the developing countries to achieve collective self-reliance, and the development of money markets in certain regions of the developing world.

28. Neither should it be forgotten that ECDC, in this case in the financial and monetary field, should be conceived in two basic and mutually inter-related areas - first, consultation and co-ordination, and secondly, specific co-operation.

29. In the area of consultation and co-ordination, the developing countries have made significant progress in recent years since, as a result of the first meeting of Finance Ministers of the Group of 77 in September 1979, the so-called "blue book" containing a programme of action for international monetary reform was presented to the international community.

30. As regards financial and monetary co-operation among developing countries, the most important progress achieved so far has basically been outside the programmes multilaterally agreed on by participants. Clear examples of this are the support provided by OPEC and by the energy-financing mechanism adopted by Mexico and Venezuela for the benefit of the Central American and Caribbean countries. 5/

Chapter III

PROGRAMME OF IMMEDIATE ACTION FOR FINANCIAL AND MONETARY CO-OPERATION AMONG DEVELOPING COUNTRIES

31. In view of the background and analysis presented in the preceding pages, a programme of immediate action for financial and monetary co-operation among developing countries should be designed and implemented. It should have the following central objectives:

- (a) To link and distinguish between consultation and co-ordination

activities, on the one hand, and economic co-operation activities, in this case of a financial and monetary character, on the other;

- (b) To adopt viable short-term measures;
- (c) To encourage more links between sectoral economic co-operation activities and financial and monetary activities;
- (d) To highlight the possibilities and activities available at the sub-regional and regional levels; and
- (e) To harmonize and strengthen the financial and monetary co-operation activities of the Group of 24 and the Group of 77.

32. In the light of the foregoing, the draft programme of immediate action could be divided into the following sections:

- (a) Consultation and co-ordination;
- (b) Short-term financial and monetary co-operation;
- (c) Additional ideas within the framework of financial and monetary co-operation at the subregional and regional levels; and
- (d) Institutional questions.

A. Consultation and co-ordination

33. As already mentioned, the Group of 77 approved, in September 1979 at the finance minister level, the outline of a programme of action on international monetary reform, which was submitted at the Annual Meeting of IMF and the World Bank in Belgrade, Yugoslavia.

34. Two years after its formal presentation, no action has been taken on most of the questions raised therein, particularly those in the programme for immediate action.

35. Thus, to mention a few examples, in the area of the transfer of real resources, concessionary aid has neither grown nor met the conditions established in the relevant paragraph of the programme of action; the IMF has postponed the in-depth analysis of the creation of a link between SDR allocation and the granting of more development assistance; the necessary steps to implement section B of Trade and Development Board resolutions 165 (S-IX) and 222 (XXI) 6/ have not been taken; the World Bank, through the introduction of its structural adjustment programme, has apparently misinterpreted two proposals in the programme of action - the proposal to channel at least 25 per cent of total resources of the multilateral financial institutions to programme lending, and the proposal to create a medium-term financing facility which could help to meet developing countries' adjustment requirements;

no regular annual SDR allocations have been established in sufficient amounts to meet the needs of member countries with regard to increasing their reserves; and, in addition, the IMF has not supervised in a balanced and equitable manner the exchange and balance-of-payments policies of the surplus and deficit countries.

36. In the light of the foregoing, continuous insistence of the full implementation of the programme of immediate action is recommended, as was done at the most recent Annual Meeting of the IMF and the World Bank. Furthermore, at the consultation and co-ordination level, the developing countries, through the Group of 24, should pay special attention to the following points, in preparation for forthcoming 1982 meetings, including the Ministerial session of the Trade and Development Board:

- (a) The need to adopt a global and integral approach to the analysis and solution of international economic issues, which should start especially in the IMF and the World Bank, from exercises similar to those carried out by the UNCTAD secretariat in its Trade and Development Report;
- (b) To establish the principles and objectives which will govern the developing countries' participation in the GATT Ministerial Meeting, to be held in November 1982, specifically in the area of services 7/ and the relationship between foreign investment and trade;
- (c) To determine the policies which will govern the developing countries' behaviour especially within the World Bank, in the general area of foreign investment;
- (d) To set up an institutional strategy that will enable UNCTAD VI to take decisions which will strengthen UNCTAD's role in the services 8/ and foreign investment areas.

B. Short-term financial and monetary co-operation

37. The examination of policy proposals which are viable in the short term is the central feature of the draft programme of immediate action for financial and monetary co-operation among developing countries. To this end, and having in mind the four programmes that have so far been adopted by the members of the Group of 77 9/ - Manila 1976, Mexico City 1976, Arusha 1979 and Caracas 1981 - and especially at the last-mentioned conference, some proposals which in the author's judgment deserve special attention have been selected, while others have been added after a series of consultations.

38. Because of their importance, various proposals adopted at Caracas have a possibility of being examined both by the Group of 24 and by the various expert groups which were to meet before the end of 1981 to discuss financial and monetary matters, groups which originated from the decisions of an institutional character in the Caracas programme. 10/

39. Emphasis should be placed, inter alia, on the following proposals:

"Special attention should be given to the setting up of regional and interregional trade development banks as well as to strengthening existing regional ones, broadening the fields of operation and encouraging the participation of all countries concerned with the region" (first part of paragraph 70 (b));

"Bilateral, sub-regional and regional payment arrangements should be reinforced and linkages among themselves should be devised in order to facilitate inter-regional payments arrangements" (paragraph 70 (c)).

40. With respect to the first proposal, the Latin American Export Bank (BLADEX) began its activities in January 1979 with the purpose of promoting exports of Latin American goods and services, preferably non-traditional exports.

41. The main objectives of this mechanism are to ensure the financing and refinancing of export credit for Latin American goods and services (preferably non-traditional exports) and to act as a complement to existing national and regional mechanisms.

42. The shareholder banks are the Central Banks or State entities designated by each country (class A shares), commercial banks or other entities with a majority of Latin American capital (class B shares), and private commercial banks and financial corporations different from those mentioned above, duly authorized by the majority of class A shareholders (class C shares). At the most recent meeting of BLADEX, a new category of shares (class D shares) was established for the international financial institutions.

43. The anticipated resources for these operations originate from the Bank's capital, deposits received from the Eurodollar market and special agreements to purchase banking acceptances created by BLADEX.

44. Depending on each case, the policies cover up to 100 per cent of the amount requested for export credit financing.

45. Interest rates are determined by the competitive conditions of the international financial market, plus a spread determined by commercial criteria that generally prove competitive in comparison with the present market situation.

46. The fixed terms are up to 180 days in the case of acceptances (post-shipment) and up to 360 days in the case of advance payments (pre-shipment and post-shipment). The transactions eligible for financing through medium-term export credits would include purchases (either abroad or in the domestic market) of capital goods and the development

of infrastructure designed to expand the export capacity of Latin American countries.

47. The resources available for these operations originate from BLADEX placements of its own obligations in the international finance market (bonds and deposit certificates) and from medium-term loans granted by commercial banks.

48. The coverage criteria are similar to those applied for short-term operations. In this case interest rates are determined by international financial market conditions, plus a spread depending on the requested amount and the duration of the project to be financed. The terms - one to seven years - are compatible with the project to be financed. Normally, they do not exceed this limit. The request for guarantees depends on the analysis of the proposal to be financed.

49. From information published in June 1981, it is known that the Bank's total assets amounted at that time to \$ 533.5 million. In the same month of June, the following were the most significant actions taken by BLADEX: (a) a Eurodollar market issue of \$ 30 million; and (b) a syndicated loan of \$ 50 million with a four-year maturity granted to the Central American Bank for Economic Integration (BCIE). This loan, the purpose of which is to finance trade among the member countries of the Central American Common Market, is the largest contracted by BCIE from the private international market.

50. On the basis of this experience, the Group of 24 might consider the establishment of a similar trade-financing scheme of an interregional character. Its main characteristics might be as follows:

- (a) It could initiate its operations with a limited capital;
- (b) Countries which so decided could participate with an equal number of shares;
- (c) Shares could be granted to private institutions in the member countries, and to regional and international organizations such as the International Finance Corporation;
- (d) It would have its own juridical personality and its headquarters should be located in a recognized financial centre; and
- (e) It would in principle operate on commercial terms and could also act as a commercial information bank and as a marketing spearhead.

51. Bearing in mind the need to link sectoral and financial activities, and once the possibility of implementing the global system of trade preferences among developing countries becomes evident, a second phase could be envisaged in which the Bank could provide support for the trade flows that would develop under the system.

52. As stated previously, the second proposal was generated on the basis of resolution 1 adopted by the Third Ministerial Meeting of the Group of 77 (January-February 1976, Manila); in this resolution priority was given to the preparation of studies on a world network of payments agreements between developing countries.

53. At present there are seven multilateral settlement agreements in which 47 developing countries actively participate and which are organized on a sub-regional basis in Africa, Asia and Latin America. Most of these agreements are of recent origin and consequently there has been little experience of fully multilateral settlements of all types of current transactions. Nevertheless, the main technical characteristics of these agreements are similar to those needed for a more complete network.

54. There are also five sub-regional credit agreements in Asia, Latin America and the Arab region in which 47 developing countries participate, but no one considers that any of them constitutes a payments union. These agreements are linked to the multilateral global support for the balance of payments as "common funds of reserves" or as stabilization funds, and involve a certain degree of conditionality in the application of relevant economic policies.

55. The best way to start work on the attainment of the objectives of a payments agreement would be to make use of the existing co-ordination committee on multilateral payments arrangements and monetary co-operation among developing countries, which is composed of official representatives of the existing agreements and which new participants can join. This committee's rules of procedure provide precisely for the examination of means of establishing links between different payments agreements at the technical level. The fact that the UNCTAD secretariat is to act as the committee's technical secretariat is another advantage that will facilitate the establishment of a network in which all the developing countries may participate.

56. In this connexion, because of its rules and composition, the co-ordination committee is considered to be the most appropriate forum to discuss the technical and political aspects of a world monetary co-operation system among developing countries.

57. It is desirable that the Group of 24 should know about the latest developments within the co-ordination committee in order to examine and put into perspective new developments, such as those that occurred in 1981 under the Santo Domingo Agreement (see annex II).

58. In the light of the favourable experience achieved with the Multilateral Aid Agreement to Alleviate Transitory Liquidity Deficiencies (the Santo Domingo Agreement), the Governors of the Latin American Central Banks decided to expand both the scope and the resource endowment of the above-mentioned Agreement in September 1981. They

agreed on the new objective of enabling members to meet transitory liquidity shortcomings if the shortcoming was caused by the "compensation", 11/ by a global balance-of-payments deficit or by a natural disaster.

59. The areas and conditions for the receipt of such support were defined by the following three mechanisms:

(a) First mechanism:

Objective: Support to meet liquidity deficiencies caused by "compensation".

Conditions: There should be a deficit in the "compensation account"; the country concerned should have a balance-of-payments deficit; its international reserves should be insufficient; the country participating in the settlement agreement should be a party to at least four reciprocal credit agreements.

The amounts received may exceed 30 per cent of global resources or six times the quota of the country in question established in this mechanism.

(b) Second mechanism:

Objective: Support in meeting a global balance-of-payments deficit.

Conditions: The first tranche of the IMF credit should be used up; the country should present to the "agent" 12/ a request for support justifying and relating the nature and amount of the deficit; it should have joined the mechanism within the first 90 days of its existence; it should be a party to at least four reciprocal credit agreements; the request should be approved by the Council of the Agreement. The limit on the amount should be the same as under the first mechanism.

(c) Third mechanism:

Objective: Support in meeting liquidity problems caused by disasters.

Conditions: The country concerned should present to the "agent" the justification within the six months following the disaster. The amount received may not exceed the sum of the maximum contribution or quotas established by the Council.

60. The management of the Agreement is the responsibility of the Council. The Agreement enters into effect upon its signature and its duration is unlimited. The first mechanism will enter into effect at the same time as the Agreement; the second and third mechanisms will enter into effect when at least the Central Banks have communicated to the Agent their desire to join the system, or when the sum of the quotas of eight Central Banks that have sent such communications reaches an

amount not less than 75 per cent of the total quotas of the Central Banks that have signed the Agreement.

61. In the course of the author's consultations, there emerged two additional proposals which, because of their nature, could well be included in the short-term analysis to be carried out by the Group of 24:

(i) Foreign debt management

62. This proposal relates to the need to take advantage of the experience gained by a number of developing countries in the management of their foreign debt. Through financial support from institutions such as UNDP and UNCTAD, experts from these countries could be recruited in order to provide technical support for other members of the Group of 77 who, owing to their relative level of development, do not have the know-how and experience of the former countries. To the same end, developing countries which have know-how and experience of international capital markets could support those which do not. The regional development banks would do well to organize seminars and support such actions.

(ii) Relationships with the Council for Mutual Economic Assistance (CMEA)

63. This proposal concerns relationships among countries having different economic and social systems, in particular the relationship that exists between developing countries and members of CMEA.

64. The basic idea is that the Group of 24 should examine the possibility of setting up a mechanism to facilitate the use of trade balances between both parties with the purpose of finding flexible solutions to the problem of the non-convertibility of the rouble. Among other solutions, consideration might be given to a procedure whereby those developing countries with surpluses in their trade with CMEA members might adjust them through the acquisition of goods and services from developing countries which had unfavourable balances with CMEA members.

65. The experience which UNCTAD has acquired through the consultative mechanism aimed at solving the problems in economic and trade relations between countries having different economic and social systems would be of the utmost value at the session of the Group of 24 which, should it consider such a cause appropriate, might include the subject under discussion in its agenda.

66. The Caracas High-Level Conference made various proposals which, if examined separately, would appear to have few possibilities of being implemented. Nevertheless, with the idea of searching for a flexible scheme to integrate a number of these proposals, we shall make an effort

to draw up a practical list that responds to the need to link more appropriately the sectoral aspects of economic co-operation with the aspects relating to financial co-operation in the short term.

67. The proposals referred to are contained in paragraphs 70 (d), 71, 72, 74, 75, 76, 77 (a), (b) and (c), and 78 (see annex III).

68. Apart from the fact that mention is made in a number of these instances of establishing groups of experts of the Group of 77, a subject which will be dealt with in the final part of this paper, the major focus of the proposals may be summarized in the following manner:

- (i) Viable projects should be identified in areas such as energy, infrastructure, raw materials, agriculture, capital goods, the creation and adaptation of technology, trade and transport;
- (ii) Additional resources of developing countries should be oriented towards ECDC;
- (iii) Adjustments in national legislation should be made so that, without harming the interests of the countries making such adjustments, preferential treatment might be accorded to developing countries in various areas, such as incentives, double taxation agreements, and special and differentiated treatment in international bidding and government procurement policies.

69. In the light of these considerations, and taking into account paragraphs 72 and 74 of the Caracas Programme of Action concerning the need to find investment opportunities and feasible projects, we propose to integrate within a simple mechanism:

- (a) The need to disseminate information on viable projects and investment opportunities;
- (b) The linkage of the preceding idea with the possibilities for diversifying investments by developing countries; and
- (c) The need to carry out, by means of bilateral and/or multilateral actions, adjustments in national legislations so that, without harming the interests of the recipient country, special treatment may be given to the developing countries.

70. A council of financial institutions of developing countries might be the most suitable means of carrying out this task in a harmonious manner. This council, composed mainly of institutions of developing countries, would serve as a focal point for regional, sub-regional and inter-regional projects, for harmonizing criteria for execution and investment incentives, and for establishing priorities.

71. A vital principle should be emphasized in this exercise: benefits would be mutual, special attention being paid to the varying degrees of relative development of the participating countries.

72. Furthermore, taking into consideration the broad experience of various organizations in the United Nations system such as UNDP, FAO, UNCTAD and UNIDO which manage projects at the sub-regional, regional and inter-regional levels, those with the best potentialities might be indicated to the council.

73. Given its responsibilities in this area, UNCTAD could undertake the initial task of summarizing and disseminating information on investment projects and opportunities in order to submit them to council members so that the activities of the council can be started as soon as possible. At a later stage, consideration might also be given to establishing links with regional development banks and with the World Bank.

74. On the basis of these suggestions therefore the Group of 24 should attempt, as a first step, to draw up a precise plan of concerted action, which would be a central part of the programme of immediate action on financial and monetary co-operation among developing countries.

75. The remaining proposals in the Caracas Programme of Action will have to be considered by experts from the Group of 77, or a broader analytical effort will have to be made in the future; moreover, their feasibility will depend on the execution of the proposals.

C. Additional ideas within the framework of financial and monetary co-operation at the regional and subregional levels

76. It should be mentioned that the following ideas might also form part of the tasks which the proposed council of financial organizations of developing countries would undertake or, if it was so decided, they could be studied separately.

1. Establishment of joint ventures

77. Bases for the establishment of joint ventures exist at the regional and sub-regional levels which would be mutually attractive and offer benefits to all the parties involved. In this area of co-operation, it is reasonable to assume that there will be flows of financial resources since those providing them may expect to obtain attractive returns.

78. The joint ventures should be established in the priority sectors of the participating countries' economies, such as fisheries, agriculture, agro-industry, mining, mineral processing, oil, gas, petrochemical products, chemicals, fertilizers, pharmaceuticals, textile products,

forestry-based industries, construction material, commodities, food processing, transport, communications, electrification, water supply, insurance and reinsurance.

79. Such joint ventures would give a boost to the exports of developing countries, give rise to an inflow of foreign currency to alleviate balance-of-payments problems, improve bargaining positions, both in the capital markets and in the international technology and manufactures market, promote the transfer of technology between developing countries, help to generate employment, investment and savings, improve the terms of trade and facilitate regional integration.

80. There are several precedents and projects in this area which might serve as basic inputs for the activities that the above-mentioned council of financial organizations could undertake. Likewise, in such tasks, it would be important to make use of the joint-ventures scheme for developing countries which is co-ordinated by the United Nations Industrial Development Organization (UNIDO).

2. Regional programmes for energy co-operation among developing countries

81. Once the positive results of the agreement on energy co-operation between Central American and Caribbean countries ^{13/} are confirmed, it is proposed that similar programmes should be undertaken in the various regions and sub-regions of the developing world. These agreements should also help to strengthen regional integration and contribute to the development and industrialization processes in the developing countries.

82. These programmes might be expanded so as to give impetus at the same time to agricultural projects between developing countries, in order that those among them with food shortages might mitigate their problems by contributing to the financing of agricultural projects in developing countries whose natural resources offer a vast potential for food production.

83. In addition, through other types of preferential schemes, some oil-exporting developing countries and the OPEC Fund have undertaken very important activities that should be examined in this context.

3. Trade deficit financing fund

84. This fund would operate at the regional or sub-regional levels and its main function would be the financing of deficits recorded by the beneficiary countries as a group in their intra-regional trade.

85. The fund's resources might be derived from stand-by credits

provided by the Central Banks of the region or subregion in question and from other international sources of financing.

4. Lines of credit for food

86. Taking advantage of, and at the same time strengthening, the regional or sub-regional financial organizations of the developing countries, resources might be channelled into agricultural projects on the basis of three priority criteria:

- (a) The acquisition and maintenance of a reserve of food in those developing countries that are vulnerable to shortages;
- (b) The support of those countries suffering from a food crisis owing to natural phenomena or disasters; and
- (c) Financial assistance to countries facing balance-of-payments problems resulting from food imports.

5. Financing facility for productive investment in developing countries

87. Traditionally, the regional banks and development agencies channel the greater part of their financial resources into support for economic infrastructure projects in the developing countries. For this reason, it is proposed that their area of operation should be expanded to cover the establishment of lines of credit for the promotion of productive investment in developing countries.

88. Such an effort should involve the sectoral commitments that are set out in the report of the Caracas Conference so that sectoral requirements may be responded to with a specific and appropriate financing service.

89. In using resources to further these objectives, account should be taken of the need to promote regional economic integration and to provide support for the expansion of trade among developing countries.

90. As far as the promotion of regional economic integration is concerned, it is important that the regional banks should turn to UNDP for the financing of regional development projects and the UNDP should, in turn, raise the proportion of the indicative planning figures channelled to the promotion of regional integration.

D. Institutional questions

91. With the object of securing the endorsement of all developing

countries for the proposals considered in this document and for certain additional proposals that may emerge from discussions with the Group of 24, and taking account of the institutional decisions that emerged in Caracas, the following timetable for action is proposed:

- (a) Without infringing the Group of 77 decisions to convene five meetings of competent experts, the Group of 24, perhaps on the basis of the ideas contained in this document, might agree, at a special meeting convened for the purpose, on a programme of immediate action;
- (b) If by that time not all the proposed meetings of the Group of 77 have been held, except for that referred to in paragraph 67 of the Caracas Programme, 14/ agreement should be sought between the Chairmen of the Group of 24 and the Group of 77 on the convening of a joint meeting of the two groups in order to consider the work done by the Group of 24;
- (c) Once this work has been examined, a second meeting of the Group of 77 should be convened, through the good offices of the Yugoslav Minister of Finance and at the Finance Minister level, in order to sanction the document and to decide on priorities in the area of consultation and co-ordination to be presented by the developing nations on the occasion of the next Annual Meeting of the IMF and World Bank. The proposed Ministerial Meeting of the Group of 77 might be held in Toronto, Canada.

FOOTNOTES

1. See report of the Conference on Economic Co-operation among Developing Countries, Mexico City, September 1976 (TD/B/628).
2. See Arusha Programme for Collective Self-Reliance and Framework for Negotiations (TD/236).
3. See Conference resolution 127 (V) on ECDC.
4. See report of the High-Level Conference on ECDC, Caracas, May 1981 (A/36/333 and Corr.1).
5. See annex I.
6. Board resolution 222 (XXI) was adopted after the "blue book" had been presented.
7. The services question covers the areas of banking, insurance and investment.
8. See resolution 119 (V), UNCTAD, Manila.
9. This document does not refer to the programme of economic co-operation of the non-aligned countries and other developing countries.
10. Extract from the final report of the High-Level Conference on ECDC held at Caracas, 13-19 May 1981 (relating to sections dealing with finance and with mechanisms for co-ordination, monitoring, follow-up actions and evaluation).
11. "Compensation" refers to the quarterly settlement of the reciprocal payments and credit system of the Latin American Integration Association (ALADI).
12. "Agent" means the "Central Bank" that is in charge of managing each mechanism.
13. See annex I.
14. See annex III.

ANNEX I

SAN JOSE AGREEMENT

In August 1980, the Presidents of Mexico and Venezuela, meeting in San José, Costa Rica, issued a joint declaration outlining the programme of energy co-operation between Central American and Caribbean countries.

The idea that this programme should be implemented resulted from the recognition by both Governments that there is a need for mutual co-operation activities among developing countries in order to achieve their goals of economic and social progress.

The programme states, inter alia, that it is necessary for all developing countries to contribute to the creation of the New International Economic Order, to organize and rationalize the production, distribution, transport and consumption of energy, to adjust the prices of raw materials on world markets, and to diversify and rationalize the use of energy resources.

In short, the two Governments stated that it was their intention to give priority to supplying oil to other developing countries and to implement specific measures aimed at alleviating the pressing problems of the net oil-importing countries of the Central American and Caribbean regions.

In order to achieve these objectives, the two leaders committed themselves to provide up to 160,000 barrels a day, shared equally between their two countries, towards the net domestic imported oil requirements of the countries of the area, and to contribute to the corresponding official financing.

Each of the two countries separately concludes commercial contracts with the Governments of the beneficiary nations under the programme and stipulates its own practices regarding quality and selling price.

Both countries have committed themselves to granting credits to the beneficiary countries in the amount of 30 per cent of their respective oil bills for a five-year term with an annual interest rate of 4 per cent. The term will be 20 years and the rate of interest 2 per cent when the credits are intended for priority economic development projects, especially in the field of energy resources.

In August 1981, the Mexican and Venezuelan Governments announced their decision to extend the energy co-operation programme for a further year. At this time, it was also decided to expand the original agreement to cover, among the projects to be financed, those that promote sub-regional economic integration.

The original beneficiaries of the programme were Barbados, Costa Rica, the Dominican Republic, El Salvador, Guatemala, Honduras, Jamaica, Nicaragua and Panama. The programme may be expanded to benefit other countries.

On the basis of the oil-supply agreements signed to date, and without considering the part corresponding to Venezuela, estimated credit for the beneficiary countries under the agreement (on the basis of total supplies delivered from 3 August 1980 to 20 August 1981, and estimated supplies up to August 1982) amounts to approximately \$ 393 million.

ANNEX II

MULTILATERAL AID AGREEMENT TO ALLEVIATE TRANSITORY
LIQUIDITY DEFICIENCIES
(SANTO DOMINGO AGREEMENT)

The Santo Domingo Agreement 1/ is a financial instrument established by the Central Banks of the ALADI member countries and by the Dominican Republic with the object of granting each other mutual assistance in the face of temporary liquidity shortages that they may suffer as a result of the process of Latin American economic integration. To this end, the Central Banks agreed to grant each other lines of credit, the global amount of which is determined by unanimous agreement of the members of the Financial and Monetary Policy Council.

The Agreement was funded with a limited amount of resources that gradually grew to \$ 263.3 million on ordinary terms and a further \$ 60 million on extraordinary terms. The signatory countries agreed on the need to increase its resources and to expand its field of activity.

To this end Mexico proposed, in the Financial and Monetary Policy Council and at the first session of Finance Ministers and Directors of the Central Banks of the Latin American Economic Region (SELA) member countries, that a second section of the Santo Domingo Agreement should be created in order to solve global balance-of-payments problems. Argentina suggested the establishment of a financing mechanism to deal with lack of liquidity caused by natural disasters.

These proposals were fully discussed by the Council's advisory body, the Advisory Commission on Monetary Affairs, and finally they were approved at the first session of the Council for Financial and Monetary Affairs 2/ held in Panama from 21 to 23 September 1981.

Thus the Santo Domingo Agreement currently comprises three mechanisms:

- (1) Financing mechanism for multilateral compensation of reciprocal debts and credits; in order to give each other mutual support in enabling members to meet shortages of

1/ This Agreement was signed at the fifth meeting of the Financial and Monetary Policy Council in Santo Domingo, Dominican Republic, in September 1969.

2/ Which replaced the Financial and Monetary Policy Council when ALADI was set up to replace the Latin American Free Trade Association.

liquidity resulting from compensation, 3/ the Banks undertake to make contributions to a requesting Central Bank which is in this situation;

- (2) Financing mechanism for global balance-of-payments deficits; under this mechanism the Central Banks agree to provide each other with reciprocal support in meeting global balance-of-payments deficits of member countries. For this purpose they undertake to make contributions to a Central Bank which is in this situation, and they offer guaranteed support to the requesting Bank in order to facilitate its access to the international capital markets;
- (3) Mechanism to deal with lack of liquidity caused by natural disasters; the Central Banks undertake to provide each other with reciprocal support in enabling members to meet any shortages of liquidity resulting from natural disasters.

The Santo Domingo Agreement will have a capital of \$ 695.9 million comprising \$ 263.3 million for the first mechanism, \$ 263.3 million for the second and \$ 169.3 for the third.

3/ Pursuant to participation in the ALADI system of reciprocal payments and credits.

ANNEX III

EXTRACT FROM THE FINAL REPORT OF THE HIGH-LEVEL
CONFERENCE OF THE GROUP OF 77 ON ECONOMIC
COOPERATION AMONG DEVELOPING COUNTRIES,
CARACAS, 13-19 MAY, 1981

FINANCE

Assistance in Alleviating the Balance-of-Payments Problems of Developing Countries

65. Many developing countries are experiencing severe balance-of-payments problems because of, inter alia, lack of basic infrastructure, the deterioration in their terms of trade in the past decade, and also because of the slow growth of their share of the markets in the world economy. A full response to this problem requires action at the global level and such action must be vigorously pursued. In this connection the Conference recommended that developing countries should co-ordinate their positions in the relevant international fora and that developing countries themselves take concerted action in this area unilaterally in the spirit of solidarity and in pursuance of the principles of self-reliance through institutions of the developing countries.

66. The Conference recommended:

- (a) the enlargement of existing financing facilities administered by some developing countries and
- (b) the examination, in the context of para. 79, of the feasibility of a financing facility to meet the balance-of-payments problems, with contributions from interested developing countries and administered by them.

67. The Conference recognized that efforts in this direction should in no way limit, nor be a substitute for, the expansion of resources available from the existing multilateral institutions. It was recommended that developing countries should intensify collective efforts in international fora to ensure that developed countries join the developing countries in establishing a mechanism to alleviate the financial burdens imposed on the developing countries on account of oil price adjustment and the continued inflation of the prices of their imports of goods and services from developed countries and that a group of experts be established to meet in Baghdad during the second half of 1981 in order to work out the modalities of such mechanisms.

68. The Conference recommended that developing countries concerned should seek increases in the capital of existing regional and sub-regional development banks comprising industrialized and developing countries. In this context, they should increase their share in such capital and so increase their participation in the decision-making processes of these financial institutions. Membership in these banks

should be enlarged to include all interested developing countries of the region as well as other developing countries wishing to be contributors, and the structures and lending programmes should more closely respond to the real needs of the developing countries, including, inter alia, their need for financing of pre-investment projects. Furthermore, developing countries should support, within these regional and sub-regional development financing institutions, the establishment of facilities designed to undertake equity investment and promote co-financing of equity investment, in particular from other developing countries.

69. The Conference agreed that these recommendations should be examined in light of the particular circumstances and procedures of each institution.

70. The Conference recommended that financial flows among developing countries, both governmental and private, should be stimulated through a series of policies and measures, among which the following deserve immediate attention:

- (a) Governmental and semi-governmental institutions of developing countries should increase their deposits in other developing country banks particularly those operating in international markets. Developing countries should encourage their institutions to increase their participation in the banks of developing countries on the basis of commercial practices;
- (b) Special attention should be given to the setting up of regional and interregional trade development banks as well as to strengthening existing regional ones, broadening the fields of operation and encouraging the participation of all countries concerned within the region. The Conference recommended that work on the establishment of an Export Credit Guarantee Facility should continue within UNCTAD;
- (c) Bilateral, sub-regional and regional payments arrangements should be reinforced and linkages among themselves should be devised in order to facilitate interregional payment arrangements;
- (d) Developing countries should encourage their institutions to take fuller advantage of opportunities existing in the developing countries' financial and capital markets, including negotiated credits and equity investments;
- (e) Developing countries should increase their participation in the purchase of financial instruments issued by national governments, central banks, public and private companies of other developing countries in the international capital market, on the basis of commercial practices.

It was also suggested that the financial authorities in developing countries with a strong position in international capital markets should assist other developing countries in securing greater access to financial resources from these sources through such means as syndicated loans.

71. The Conference recommended that interested developing countries maintain a favourable economic environment, in conformity with their national legislation, policies and economic systems, conducive to bilateral and multilateral financial co-operation among themselves through a range of investment incentives, inter alia, joint venture agreements, as well as other instruments designed to enhance the soundness and attractiveness for an increased flow of capital among themselves. Treaties to avoid double taxation would greatly facilitate this increased flow. It was recommended that to achieve the foregoing objectives, relevant measures should be elaborated by a technical group of experts.

72. The Conference recommended the improvement of the institutional framework among developing countries to ensure greater awareness of the investment opportunities, and proposed that the appropriate authorities should meet at an early date to exchange information and elaborate their details.

73. The Conference, recognizing the valuable work done by the Group of 24 and by the experts of the Group of 77, recommended that this work should continue and in particular that the Group of 24 should give greater attention to monetary and financial aspects within the programme of ECDC.

Financial Support for Development

74. The Conference recommended the establishment of a technical group of experts to study the ways and means for the dissemination among developing countries of relevant information about development projects undertaken in developing countries in order to enable other developing countries to participate in the tendering of these projects through international competitive bidding.

75. In international competitive bidding the Conference recommended that, for development projects to be executed in their territories or financed by them, developing countries should take appropriate measures to eliminate the disadvantages faced by bidders from developing countries vis-à-vis those from the developed countries. These measures should include, inter alia, the provision of information on the conditions of the bidding on a timely and prompt basis, as well as special treatment consistent with national practice.

76. It recommended that preferential treatment should also be extended to suppliers from developing countries in the context of government procurement taking into account cost, quality and the time factor.

77. The Conference considered that the contribution of ECDC to financing development goes beyond the transfer of resources and should be considered as a process of mutual benefit and it discussed,

inter alia, the following points:

- (a) The need for an adequate flow of resources for development financing should be addressed by developing countries also within the framework of ECDC. The financing requirements of developing countries imply an increased commitment for the transfer of additional resources from the industrialized countries if the targets set forth in the Third International Development Strategy are to be met. The amount and modalities of development financing from developed countries has been inadequate. During the past decade financial co-operation among developing countries for development has been notably increased. However, it was mentioned that further possibilities of co-operation are open on a bilateral and multilateral basis. In this regard, several proposals which had been made, were noted.
- (b) It was considered that utilization of financial and other resources should be devoted to the priority sectors of the developing countries such as energy, infrastructure, raw materials, agriculture, capital goods, trade and transport in accordance with their national plans and programmes.
- (c) A number of financial activities might contribute to strengthening the development perspectives of developing countries. Flexibility in institutional arrangements would be helpful to accommodate different possibilities of action.

78. The Conference recommended that financing should be available for projects and activities which would lead to the further expansion of ECDC, and that this could be facilitated by strengthening the links between existing regional and subregional institutions.

79. It was recommended that a Group of Experts be established to examine the proposals made by the Non-Aligned Movement and the Group of 77, and to propose concrete measures by the end of 1981 for financial co-operation in the field of development financing, inter alia, the entry into force of the Non-Aligned Solidarity Fund, and the banks for developing countries as indicated by the Group of 77 Ministerial Meeting at Arusha in 1979.

EXPORT FINANCING IN DEVELOPING COUNTRIES

UNCTAD secretariat*

I. Introduction

1. The role of export credit in the promotion of exports has gained increasing importance, especially in the case of exports of capital and durable consumer goods. The financing of trade in primary commodities is generally effected through well-established commercial channels, either the transnational companies which are active in the production and trading of these commodities or commercial banks 1/ engaged in short-term trade financing. Moreover, because of the short-term nature of the financing of this type of goods, exporters do not find great difficulty in raising funds from commercial banks.

2. Exports of manufactured goods, however, are usually financed by longer-term credits. Competition in such trade has escalated since the mid-1950s, when the industrialized countries started increasing their exports of capital and durable consumer goods. Because of the durability and high unit price of these products, because also of the magnitude of the transactions, buyers, particularly those from developing countries, seek deferred payments and credits are generally extended on a medium- and long-term basis. The ability to offer to the buyer credits with advantageous terms has become a crucial factor in winning contracts. Over the past two decades, industrialized countries have engaged in an intense credit race, giving strong support and subsidies to their exporters in the provision of export credits. The recent recession in member countries of the Organisation for Economic Co-operation and Development (OECD) is further aggravating competitive pressures for continued subsidization of export finance.

3. Within this changing pattern of international trade, a number of developing countries have emerged as competitive exporters of manufactured products. However, because of a lack of resources for export financing, developing countries are facing difficulties in their efforts to diversify their exports into new products and new markets. It is often found that exporters of non-traditional goods or of goods destined for new markets do not have easy access to financial resources without governmental support.

4. For purposes of analysis it is convenient to classify exports from developing countries into two broad categories: traditional and non-traditional exports. Export credit associated with these two categories may differ with respect to its terms and to the way in which

* August 1982.

it is financed. Although traditional and non-traditional exports may not necessarily comprise the same products for every country, the definition used here may be applied to the great majority of developing countries. Traditional exports are defined to include primary agricultural and mineral products and products with a minor degree of industrial transformation, while non-traditional exports consist of manufactured products (consumer and intermediate goods, as well as capital goods) and services. Exports of the various categories of goods from developing countries are reported in tables 1, 2, 3 and 4 of the statistical appendix. Non-traditional exports, the manufactured goods, are as defined in the UNCTAD Handbook of International Trade and Development Statistics. 2/

5. Exports from developing countries have been increasing rapidly, particularly in the last decade. Exports of manufactures are growing faster than other exports with the exception of fuels. The exports go in the main to developed market-economy countries (see table 5 of the statistical appendix), although in the case of manufactured goods the proportion going to other developing countries is quite substantial. (In 1979, for example, 24.6 per cent of total exports and 35 per cent of exports of manufactures from developing countries went to other developing countries.) It can be seen from tables 2, 3 and 4 that a large part of the trade among developing countries consists of intra-regional trade - in the order of 70 to 90 per cent for most commodity groups in Latin America and Asia and over 50 per cent for food and manufactures in Africa. This trade structure has been fairly stable over the last twenty years, with a tendency for the proportion represented by intra-regional trade to increase in the case of non-traditional goods. In other words, there has been a lack of dynamism in the trade between developing regions, which suggests that there is considerable scope for an increase in such trade. The provision of export credits will then become one of the essential elements in the promotion of such trade, 3/ mainly because the shortage of foreign exchange that most developing countries are facing will induce importing countries to seek deferred payment terms.

6. The present study will attempt to examine the difficulties encountered by developing countries in the area of export financing and to put forward some proposals to respond to the needs which remain unfulfilled at the national, regional and international levels. The analysis will focus on post-shipment credit, i.e. during the period when foreign exchange credits are involved and problems are likely to become critical. This does not imply that all the problems at the pre-shipment stage have been solved; they are linked, however, to overall development financing problems. 4/

II. Export financing in developed countries

7. Before going into the details of export financing in developing countries, it may be useful to give a brief description of how export financing is organized in developed countries.

8. Virtually all the economically developed countries today have an efficient and comprehensive system to ensure financial support for exports, especially exports of capital goods, which are usually sold on medium- or long-term credit. The export financing system in these countries provides ample financial resources to the exporters, resources which are very often subsidized by the government concerned.

9. The sources of export financing are various: the exporting firm, the national banking system, the international capital markets or the government. The domestic banking system, however, assumes a preponderant role in financing, very often with governmental support in the form of refinancing facilities at preferential rates or of an interest rate subsidy. Other forms of financing are provided by the forfaiting and factoring markets.

10. International capital markets also constitute an important source of finance. The developed countries, given that they are highly rated by lending institutions, have an easy access to these markets.

11. Increasingly, however, most governments are becoming involved less in providing direct export financing than in reducing the costs and risks associated with such financing. Generally speaking, the government intervenes in business with relatively high risk - that is to say, with longer-term maturities and in riskier markets. Government support traditionally takes the form of:

- the provision of refinancing facilities at preferential rates;
- an interest subsidy scheme;
- credit insurance services; and, to a much lesser extent, direct official loans to the supplier or to the buyer.

12. Some countries, such as Belgium and France, provide refinancing facilities at low cost through the central bank or another rediscounting institution.

13. Government support through interest subsidy schemes ^{5/} substantially insulates the terms of export credits from borrowing conditions existing in domestic as well as international markets. The interest rates applied to officially supported export credits are typically lower than those prevailing on money markets for the same maturities. Furthermore, government interest rates are fixed for the whole duration of the loan and they are stable, i.e., they do not vary much between old and new loans. Government subsidies are usually given to loans denominated in domestic currency, but more recently their scope has been enlarged to cover Eurocurrency loans, since the Eurocurrency markets represent a considerable source of export finance. This practice was initiated in 1977 by the British Export Credit Guarantee Department, which gave insurance cover and guaranteed an agreed rate of return to banks financing export credits at fixed rates in

Eurocurrencies other than sterling. The British example in granting interest subsidies to Eurocurrency export credits has been followed by other countries, such as Italy.

14. The most widely used instrument of government support is, perhaps, export credit insurance. In practically all developed countries the government has set up corporations or designated a ministry to give insurance cover to export credits, in order to facilitate the access of exporters to sources of finance or to reduce the costs of financing. Export credit insurance is not a subsidized operation in the strict sense, since generally speaking the premium charges are set at a level which enables large claims in bad years to be met from accumulated reserves. However, export credit insurance agencies depend on government treasuries as insurers of last resort. Government-supported insurance schemes generally assume the higher-risk business, which implies longer maturities, new markets and risks of a non-commercial nature, although commercial risk is also usually included. In some countries, government insurance schemes also cover other events, such as the escalation of cost during the manufacturing period and the exchange risk. Moreover, insurance has been extended to credits denominated in foreign currency. This practice was initiated in 1977 by the United Kingdom and has been rapidly followed by other countries, such as France, Sweden, Canada, Italy, West Germany and the United States.

15. In the fourth area of government intervention, direct lending, the government provides loans itself or in co-operation with commercial banks. In general, such loans are used to finance transactions of large contract value and with long-term maturities, involving essentially capital goods and mainly those sold to developing countries. A recent development of subsidization in this area has taken the form of mixed credits. These consist of commercial lending blended with government funds in the form of government aid or development loans to developing countries. The governmental concessional funds are destined essentially to finance down-payment and local costs associated with large projects in developing countries. The result is that the cost of such credit is considerably reduced and the maturity substantially lengthened.

16. To summarize, the export financing systems of developed countries, benefiting from strong government support, usually offer the exporters ample financial resources, competitive low-cost financing and insurance against a wide range of commercial and non-commercial risks as well as providing guarantees to facilitate bank lending.

III. Export financing in developing countries

A. Export financing at the national level

17. National export financing systems in developing countries are less comprehensive and financially weaker than those in developed countries. Developing countries in general suffer from many disadvantages. A

shortage of resources, especially of foreign exchange resources, often impedes the provision of credits to foreign buyers on medium- or long-term basis. In addition, the level of interest rates is usually higher in developing countries than in developed countries, which necessitates correspondingly large interest subsidies in order to compete with low-cost subsidized credits offered by developed countries. Finally, the lack of experience is a serious handicap in the organization of an efficient banking network and of insurance agencies to provide cover against trade risks and guarantees for bank lending.

18. Distinction must be made between the financing problems of traditional and those of non-traditional exports. Traditional exports are generally sold against cash or require very short-term financing and often benefit from well-established channels of financing. These exports are usually financed by the transnational producing companies, or by the commercial banks, by way of discounting of export bills. However, small exporters or exporters to developing country markets may find difficulty in obtaining adequate financing even for traditional exports. It has been pointed out, for example, that small farmers in many African countries do not have access even to domestic credit. In a study on payments arrangements and trade in eastern and southern Africa by the International Monetary Fund, it was found that the discounting by commercial banks of bills resulting from intra-regional trade was not very frequent.

19. Non-traditional exports, on the other hand, tend to incur greater risks, as they are usually destined for new markets and require medium- and long-term financing from 180 days to five years. The domestic banking sector is often inadequate to cope with the problems faced by exporters in these circumstances. Domestic banks are generally oriented towards short-term loans granted to traditional and established clients. The new exporting manufacturing industries are often considered by banks as risky and not very profitable clients, especially when they sell their goods to other developing countries.

20. Furthermore, the ability of developing countries to finance their export credits on international capital markets is rather restricted. Many of them do not have access to these markets. Others are already borrowing heavily in the commercial Eurocurrency markets for other purposes and borrowing to support new export financing needs would count against their borrowing limits.

21. Experience of exporting manufactured products has been quite recent in developing countries. Few of them have been capable of organizing a sophisticated system of export financing to support their exporters. Furthermore, a low level of foreign exchange reserves has often impeded the provision of credits to overseas buyers.

22. Some developing countries have implemented government-sponsored export financing and export credit insurance schemes, but in most cases these schemes are modest with respect to both the volume of business

undertaken and the maturities covered. In countries where refinancing facilities are set up by the government, but where export credit insurance schemes do not exist, the central banks or other public institutions providing preferential refinancing have full recourse to the commercial banks, which, in turn, require a high collateral from the exporter. This constitutes a major obstacle for exporters of non-traditional goods in obtaining loans from commercial banks.

23. The functions of export credit insurance are to provide security to exporters with regard to their transactions with foreign buyers and to facilitate the access of exporters to financial resources. These functions are performed by providing two basic types of service: an insurance cover to the exporter against the risks, commercial and non-commercial, of non-payment by the importer; and, secondly, guarantee cover to the banks against losses through a default by the exporter. The insurance activities are rather risky and are usually assumed by the government itself or are undertaken with the support of the government. Moreover, the capacity of insurance schemes in developing countries to function on a self-supporting basis is considerably reduced in the early stages by the fact that the volume of business is relatively small and often uncertain. Furthermore, a shortage of experienced professional staff and lack of information on export credit insurance systems and practices in developed and other developing countries also constitute an important handicap.

B. Export financing arrangements in some developing countries

24. The experience of a few developing countries for which information is available in export financing at the national level will be analyzed in this section. 6/ There are various degrees of sophistication in the organization of national export financing systems. The first group of countries to be analyzed (Kenya, Nigeria, Sri Lanka) is at the simplest level of organization, where finance provided by commercial banks is often limited to the pre-shipment stage or, if provided at the post-shipment stage, is limited to the very short term; in addition, there is no official refinancing scheme and insurance mechanisms are either non-existent or have been very recently set up. The countries in the second group (Barbados, the Philippines, Venezuela, Zimbabwe) do have some government support financing mechanisms, in the form either of an export Fund or rediscounting lines at preferential rates (often limited to short-term credits), generally located in the central bank; they also have insurance schemes, whose coverage, however, is generally limited to pre-shipment credits. The third group contains the small number of countries (such as Brazil, India, Korea, Mexico) which operate relatively comprehensive systems providing both finance and insurance against a wide range of risks.

25. There is a problem common to the sample of countries under study: a foreign exchange constraint which raises the implied cost of providing post-shipment export credits. It is noticeable that government support is very often directed towards non-traditional manufactured exports and that, even where insurance schemes exist, the percentage of exports which have been insured is rather low on average.

26. In Kenya, the commercial banks, which are mostly foreign-owned, provide the finance. Post-shipment credit is normally limited to 90 days, but may exceptionally be extended to 180 days. There is no rediscounting facility in the central bank and an export credit insurance scheme was set up in 1981.

27. In Nigeria, commercial and merchant banks provide pre-shipment credits to exporters. In addition, the central bank lends directly to the commodity boards for the purpose of buying agricultural produce, the bulk of which is exported. There is no post-shipment credit. There is no official scheme for insurance and guarantee, although the establishment of an export credit guarantee and insurance scheme is under consideration.

28. In Sri Lanka, commercial banks provide funds to exporters. The central bank offers refinancing facilities which are limited to pre-shipment credits. Sri Lanka does not export goods in the categories which require medium- and long-term credits and therefore the central bank insists that all export proceeds should be recovered within 180 days. The Export Credit Insurance Corporation offers guarantees to banks for their pre-shipment credits to exporters, as well as insurance cover to exporters.

29. In the Philippines, short-term export finance is provided by commercial banks which, in turn, have access to short-term rediscounting facilities at preferential rates with the central bank. Medium- and long-term post-shipment credits have not been granted. The Philippine Export and Foreign Loan Guarantee Corporation provides pre-shipment guarantees to banks. Recently, in 1981, the Export Credit Corporation, which is owned by the government, has been created to provide direct export credits and financial guarantees (against commercial and political risks, excluding performance guarantees) to banks, and insurance cover (against non-commercial risks) to exporters.

30. In Zimbabwe, commercial and merchant banks provide funds to exporters. The central bank has a scheme for refinancing on a short-term basis, by means of acceptance credits. Post-shipment medium- and long-term credits are subject to restrictions laid down by the central bank. The Export Credit Insurance Corporation provides insurance cover to exporters against political risks (which is reinsured with the government) and commercial risks.

31. In Barbados, finance is provided by commercial banks. The exchange control rules require ordinarily that export proceeds be repatriated within six months. The central bank has a short-term rediscounting facility at preferential rates which can be used by banks only during periods of tight money. The central bank's export credit insurance and guarantee scheme offers a pre-shipment guarantee to banks on a short-term basis, as well as an insurance cover to exporters for short-term credits.

32. In Venezuela, finance is provided by commercial banks and by a government fund called FINEXPO (Fondo de Financiamiento de las Exportaciones). FINEXPO provides direct financing for buyers' long-term export credits (of five years or more) and for supplier credits, through the discounting of export paper of up to three years. In addition, FINEXPO makes available lines of credit to national and foreign financial institutions. Commercial banks use FINEXPO lines of credit to discount export paper of up to one year. They also provide financing to exporters out of their own resources and, in conjunction with FINEXPO, provide half the funds used to finance buyers' credits. However, the central bank does not have any rediscounting facility. On the insurance side, a private company insures against commercial risks for post-shipment export credits of short and medium term (up to three years).

33. In Mexico, finance is provided by commercial banks and by a specialized governmental fund, FOMEX (Fondo para el Fomento de las Exportaciones de Productos Manufacturados), set up to encourage exports of manufactured products. FOMEX is a trust fund operated by the central bank. On the insurance side, it provides cover against both commercial and political risks; in addition, a private insurance company, COMESEC, which is a consortium of several private companies and one public company, provides cover against commercial risks.

34. In Brazil, commercial banks finance export credit. In addition, a government fund called CACEX (Carteira de Comercio Exterior) grants medium- and long-term credits, by refinancing national and foreign financial institutions. A scheme of export credit insurance operates through the insurance companies to cover commercial risks, under the supervision of the reinsurance institution IRB (Instituto de Resseguros do Brazil). The IRB, on behalf of the government, insures against political risks and commercial risks which have not been covered by private companies.

35. In Korea, export finance is provided by commercial banks, the Korea Exchange Bank, and the Export-Import Bank of Korea (EXIM Bank). The central bank refinances the commercial banks at a preferential rate for short-term pre-shipment credit. The EXIM Bank, which is owned by the government, extends only medium- and long-term export credits. On the insurance side, the EXIM Bank, on behalf of the government and using resources of the Export Insurance Fund, provides cover against both commercial and political risks.

36. In India, the system of export financing is relatively sophisticated and comparable to those existing in developed countries. On the financing side, commercial banks are the source of export credit. In addition, the newly established Export-Import Bank, which is owned by the government, provides medium- and long-term credits. On the insurance side, the official Export Credit and Guarantee Corporation provides both guarantees to banks and insurance cover to exporters against a wide range of risks.

C. Export financing at the regional level

37. Where the capacity to finance exports is limited at the national level, regional facilities may supplement national efforts in mobilizing resources. However, it must be noted that existing regional mechanisms set up for the specific purpose of export financing are very few and are mainly concentrated in the Latin American region. Moreover, the size of these mechanisms is modest, compared to the needs of the regions that they cover. The only regional scheme established to deal with the problems of insurance and guarantees is the Inter-Arab Investment Guarantee Corporation 7/, which, inter alia, provides guarantees on export credits related to transactions between its member countries.

38. In the Latin American region, as already mentioned, several mechanisms operate at the regional level to provide financing and refinancing facilities to member countries. The first and oldest of these is that operated by the Inter-American Development Bank (IDB), which was created in 1963 and has subsequently been expanded. This mechanism provides refinancing facilities 8/ to member countries at a very preferential interest rate (7 per cent in 1980) under two programmes: a short-term one which refinances export credits of up to 180 days and a medium-term one which refinances export credits of more than 180 days. It is now endowed with US \$ 60 million in ordinary capital to fund the medium-term programme and US \$ 4 million to fund the short-term programme; in addition the Venezuelan authorities have entrusted it with US \$ 50 million to cover both programmes. 9/ Exports eligible for refinancing with ordinary capital resources are intra-Latin American exports of capital goods and services and other non-traditional goods and services. Exports eligible for refinancing through the Venezuelan Trust Fund are capital goods exported outside Latin America and consumer durables, wherever exported. The major part of exports refinanced by the IDB consists of intraregional trade. The countries which have benefited the most from the IDB mechanism are mainly the relatively more advanced countries (Argentina, Brazil, Jamaica, Mexico and Peru).

39. The second regional scheme is the Latin American Export Bank (BLADEX). This institution has the status of a private multinational bank. It specializes in the promotion of exports from Latin American countries and is endowed with a subscribed capital of US \$ 99 million. It started its operations in 1979. It deals only with joint stock banks and serves as a link between participating international banks and local Latin American banks, some of which do not have access to international capital markets. It is authorized to finance any transaction which will generate foreign exchange, which implies that it can also finance imports of capital goods and raw materials for export projects. It mobilizes funds by taking deposits from government banks, private banks and international development finance institutions (the Inter-American Development Bank and the OPEC Fund); by borrowing on international capital markets and through the sale of acceptances (with recourse to BLADEX) from its own portfolio. It lends through direct advances, acceptances and medium-term loans at market rates plus a margin. Non-traditional exports accounted for approximately 60 per cent of the

transactions financed by BLADEX; about 73 per cent of all exports financed by BLADEX are destined to markets outside the region.

40. The third Latin American export financing scheme is the Andean Trade Financing System (SAFICO), which was created in 1974 by the countries which established the Andean Development Corporation (Bolivia, Colombia, Ecuador, Peru and Venezuela). SAFICO finances non-traditional exports of goods and services from the Andean countries, mainly destined to other countries of the subregion. Credits are granted to the importer for periods of one to five years. However, given the strong demand for export finance, SAFICO is in need of additional resources.

41. Finally, as far as the Latin American region is concerned, mention should be made of the creation of an association of local credit insurers, which is scheduled to start operations some time during the first half of 1982. The objective of this association is to permit an exchange of information among local insurers.

42. Outside the Latin American region, regional mechanisms for export financing hardly exist, with the possible exception of the Islamic Development Bank and the Inter-Arab Investment Guarantee Corporation. The former has a trade financing programme which, in principle, can finance imports and exports, but in practice has concentrated mainly on essential goods imported by member countries with balance-of-payments difficulties - to the extent, in 1980, of roughly 64 per cent of its total financing approvals.

43. The Inter-Arab Investment Guarantee Corporation started operations in 1975 with a capital equivalent to US \$ 80.5 million. Its purpose is to provide insurance coverage for Arab investments in member countries against losses resulting from political risks. Investments eligible for its guarantee include direct investments, portfolio investments and medium- and long-term loans. It now also guarantees export credits related to transactions among member States.

44. Discussions have been held and studies prepared on various proposals for export credit financing and export credit insurance mechanisms to cover the Asian region, but so far no scheme has been put into operation.

IV. Conclusions and proposals

45. Export credit is an important instrument for achieving the diversification of exports of developing countries, through an expansion of the export of manufactured products, and for the promotion of trade among these countries. In the markets for manufactured goods, developing exporting countries face strong competition from developed countries, which are, in general, better equipped in terms of financial resources and institutional organization. As importers, moreover,

developing countries are generally subject to a shortage of foreign exchange, which leads them to seek payment on deferred terms, i.e. adequate credit from exporters.

46. The problems that developing countries face in financing export credits relate to the availability of resources and to institutional organization. As regards traditional exports, it is noted that in some countries the provision of short-term export credit has been adequately handled by commercial banks and export companies. In other countries, however, small exporters have hardly any access to financial resources. Intra-developing country trade in general suffers from the difficulty of obtaining finance from commercial banks. Such being the case, it is necessary that the governments concerned adopt measures to support small exporters and exporters to new markets more actively by direct financing or refinancing or by providing guarantees to banks in order to mobilize resources for exporters.

47. The setting up of an international facility or regional facilities to finance traditional exports would bring an appreciable support to small and less developed countries, which might not have the necessary resources. The organization, in addition, of an effective (regional) market for bankers' acceptances would enhance developing countries' access to international capital markets for the purpose of financing their trade. In this respect, mention should be made of efforts to operate a Latin American acceptance market. A proposal to create such a market for the ASEAN countries has also been under discussion. 10/

48. From the institutional point of view, the export financing arrangements in many developing countries are far from being adequate and effective. The banking system does not satisfactorily respond to the requirements of exporters in this respect, partly because banking procedures are rigid, time-consuming and security-oriented. There are, moreover, no refinancing facilities or, if they exist, the same problems occur in that area. With regard to insurance, lack of experienced and competent staff, associated sometimes with an insufficient and unstable volume of business and a shortage of credit information, often impedes the effective operation of an insurance scheme. Finally, the absence of economic information on overseas markets or credit information on foreign buyers (or both) weighs heavily in making exporters reluctant to explore new markets and to export new products.

49. In order to fill this institutional gap, technical assistance needs to be provided by developed countries or the more experienced developing countries, by regional development banks (as is the case with the Inter-American Development Bank) or by international organizations (such as the International Trade Centre UNCTAD/GATT). It may be envisaged that a regional insurance and reinsurance scheme 11/ would be set up at a later stage, with the following functions: to give direct insurance cover to exporters in countries that do not have national schemes; to reinsure exports which have been insured by national schemes; to collect and supply information on buyers and markets; and to provide technical assistance in establishing national schemes.

50. Perhaps the most important problem facing developing countries in financing their exports is the lack of financial resources. During the pre-shipment stage, foreign exchange may not be available to import material needed for producing export goods. The limited foreign exchange resources considerably weaken the ability of developing countries to extend credit for any significant post-shipment period on terms competitive with those offered by developed countries. Developed countries themselves subsidize their export credits, which aggravates the situation. In order to compete effectively in aspects additional to the quality and price of the exported products, developing countries should have resources to subsidize their own export credits.

51. Proposals to address these problems fall into two broad categories: those designed to save foreign exchange and those designed to increase the availability of foreign exchange resources. The first category includes proposals for a multilateral clearing arrangement 12/, whereby intra-developing country trade could be settled largely without using foreign exchange, through the establishment of reciprocal external accounts to compensate imports and exports against each other. The need to hold liquid balances in foreign exchange deposited with banks in London, New York, or other financial centres would be reduced. The costs to the traders of purchasing and selling foreign exchange would be eliminated - though the effect of this would be limited, since the transaction costs are small.

52. The second category includes proposals for regional or international financing and refinancing facilities and proposals for guarantees of export credit paper. There exist at present only three major regional mechanisms which effectively deal with the financing of export credit of developing countries: those of the Inter-American Development Bank (for refinancing), BLADDEX and SAFICO, all located in the Latin American region. The Islamic Development Bank provides another potential mechanism. However, the size of these regional schemes is rather modest, compared with the needs of the countries involved and their operations are more concerned with intra-regional trade than trade extra-regionally among developing countries. In regions other than Latin America, a case can be made for the establishment of regional export financing or refinancing facilities, which might be associated with the regional development banks (such as the Asian and African Development Banks), to assist countries of these regions in financing their exports. Finally, an international facility can also be considered, which would provide finance to developing countries on a world-wide basis, especially if in some regions there is not enough cohesion between countries to form a regional scheme. An international facility might also have a better standing in international capital markets, enabling it to mobilize resources on more favourable terms. However, such a financing and refinancing facility would require a very high financial contribution 13/ from member countries, particularly if both traditional and non-traditional exports were to be covered.

53. Proposals for guarantees of export credit paper are designed to facilitate developing countries' access to international capital markets.

A guarantee facility would require a smaller paid-in capital than a direct financing or refinancing scheme. By according its guarantee to export credit paper of developing countries such a facility would improve the marketability of such paper in the international capital markets.

54. Discussions on the establishment of an International Export Credit Guarantee Facility have taken place and detailed operational features of such a Facility ^{14/} have been examined within UNCTAD. Because developing countries face difficulties mainly in the provision of medium- and long-term credit, the proposed Facility would cover the range of goods which are exported on such credit terms. Consultations with experts in international capital markets suggest that export paper guaranteed by the Facility would be considered as a very attractive financial asset and the guarantee given by such a Facility would help to reduce the discount rate applied by banks in accepting such paper. On the basis of lists of goods provided by some exporting developing countries, table 6 of the statistical appendix gives estimates for selected developing countries of the value of exports suitable for coverage by medium- and long-term credit. Table 6 also indicates the distribution of such trade by destination.

FOOTNOTES

1. It is found that the establishment of commercial banks has very often been closely connected with the development of trade in primary commodities.
2. In the Standard International Trade Classification, goods in the range of 5 to 8 less (67 + 68). The Handbook is a United Nations sales publication, appearing annually.
3. The expansion of trade among developing countries depends also on other factors, such as, for example, an adequate payments system.
4. See the report by the UNCTAD secretariat, Institutional Arrangements in Developing Countries for Industrial and Export Finance with a View to Expanding and Diversifying their Exports of Manufactures and Semi-Manufactures (United Nations publication, Sales No. E.80.II.D.6), in particular, chapters II and III.
5. The OECD Arrangement on Guidelines for Officially-Supported Export Credits has fixed minimum interest rates and maximum maturities on officially-supported export credits on the basis of per capita income of recipient countries. However, these minimum rates are still low, compared to the lending rates charged by domestic banks in developed countries and by international banks.
6. The information in this section has been provided by the governments concerned during the first quarter of 1981.
7. See paragraph 42.
8. The IDB mechanism functions by rediscounting export credit portfolios of national central banks, which have themselves discounted the portfolios of their commercial banks. The financial resources are channelled to the latter banks in the form of revolving lines of credit.
9. In a study evaluating this mechanism, the IDB stated that the Venezuelan authorities have indicated their interest in reducing the use of the Venezuelan Trust Fund in export financing operations, in order to devote more resources to other long-term financing.
10. See, for example, the Far Eastern Economic Review, 15 February 1980.
11. Proposals for a regional export insurance scheme have aroused some interest in the Latin American, African and South-East Asian regions.
12. Such a multilateral clearing arrangement has been under consideration in the context of regional trade financing for Eastern and Southern Africa and for the Asian region.

13. Because this kind of activity would immobilize large amounts of funds in fairly risky transactions, the ratio of total liabilities to capital would be correspondingly low, e.g. of the order of 4 to 1.
14. See, for example, the report by the UNCTAD secretariat "Operational Features of an International Export Credit Guarantee Facility" (TD/B/AC.33/2).

STATISTICAL APPENDIX

Table

1. Exports from developing countries
2. Exports from developing countries of Latin America
3. Exports from developing countries of Africa
4. Exports from developing countries of Asia
5. Destination of exports from developing countries
6. Exports of manufactured goods suitable for coverage by medium- and long-term credit, selected developing countries.

Table 1
Exports from developing countries a/

	Million United States dollars							Average annual rate of growth per cent	
	1960	1969	1970	1973	1977	1978	1979	1960-69	1970-79
All products ^{b/}									
- world-wide	27 390	48 880	54 980	108 790	288 447	300 802	416 609	6.64	25.23
- to developing countries	6 100	9 820	10 970	21 410	68 876	73 342	103 185	5.43	28.28
All food items ^{c/}									
- world-wide	9 210	12 750	14 570	23 140	48 235	49 361	57 361	3.68	16.56
- to developing countries	1 680	2 210	2 330	4 020	9 232	9 901	15 554	3.09	23.48
Agricultural raw materials ^{d/}									
- world-wide	5 000	5 490	5 500	10 100	12 349	14 373	19 515	1.04	15.11
- to developing countries	170	235	250	265	3 315	3 798	5 391	3.66	40.66
Fuels ^{e/}									
- world-wide	7 650	16 210	18 100	43 040	164 216	158 954	235 747	8.7	33.00
- to developing countries	2 270	3 360	3 780	7 540	36 410	35 499	48 641	4.45	32.82
Ores and metals ^{f/}									
- world-wide	2 978	6 390	7 400	9 600	14 603	16 314	21 935	8.85	12.83
- to developing countries	186	515	720	1 160	2 830	3 408	5 043	12.39	24.14
Manufactured goods ^{g/}									
- world-wide	2 440	7 750	9 170	21 810	48 087	60 462	79 182	13.70	27.06
- to developing countries	1 030	2 650	3 050	5 980	16 622	20 539	27 729	11.07	27.79

Source: UNCTAD Handbook of International Trade and Development Statistics, several issues.

Notes:

- a/ The term "developing countries" is used here to include non-self-governing territories.
b/ SITC (0 to 9).
c/ SITC (0 + 1 + 22 + 41).
d/ SITC (2 - 22 - 28).
e/ SITC (3).
f/ SITC (27 + 28 + 67 + 68).
g/ SITC (5 to 8 - 67 - 68).

Table 2
Exports from developing countries of Latin America a/

	Million United States' dollars							Average annual rate of growth per cent	
	1960	1969	1970	1973	1977	1978	1979	1960-69	1970-79
All products ^{b/} :									
- world-wide	10 170	15 440	17 430	29 060	60 902	64 856	85 378	4.75	19.31
- to developing countries	1 860	3 120	3 450	5 070	15 122	15 765	22 760	5.91	23.32
- of which to Latin America	1 680	2 830	3 120	4 110	12 233	12 589	18 733	5.96	22.04
All food items ^{c/} :									
- world-wide	4 330	6 050	7 160	11 470	24 112	24 777	28 604	3.78	16.63
- to developing countries	390	660	700	1 470	3 401	3 409	4 613	6.02	23.30
- of which to Latin America	305	530	550	860	1 903	2 104	3 101	6.33	21.19
Agricultural raw materials ^{d/} :									
- world-wide	976	1 210	1 100	1 430	2 078	2 911	3 038	2.48	12.07
- to developing countries	100	225	270	315	511	639	833	9.43	13.33
- of which to Latin America	95	170	195	165	268	373	556	6.68	12.35
Fuels ^{e/} :									
- world-wide	3 240	4 030	4 150	7 980	20 138	20 239	30 506	2.45	24.81
- to developing countries	1 230	1 430	1 490	1 300	6 187	5 988	8 995	1.69	22.11
- of which to Latin America	1 150	1 350	1 440	1 240	5 617	5 288	8 073	1.60	21.11
Ores and metals ^{f/} :									
- world-wide	1 310	2 690	3 215	3 670	5 992	6 652	9 445	8.32	12.72
- to developing countries	41	204	261	379	1 047	1 159	1 976	19.51	25.22
- of which to Latin America	37	196	242	351	933	989	1 671	20.35	23.95
Manufactured goods ^{g/} :									
- world-wide	298	1 430	1 750	4 020	8 398	9 981	13 327	19.03	25.30
- to developing countries	85	585	700	1 435	3 883	4 498	6 184	23.90	27.38
- of which to Latin America	66	570	670	1 315	3 478	3 808	5 252	29.37	25.71

Source: UNCTAD Handbook of International Trade and Development Statistics, several issues.

Notes:

a/ The term "developing countries" is used here to include non-self-governing territories.

b/ SITC (0 to 9).

c/ SITC (0 + 1 + 22 + 4).

d/ SITC (2 - 22 - 27 - 28).

e/ SITC (3).

Table 3
Exports from developing countries of Africa a/

	Million United States dollars							Average annual rate of growth per cent	
	1960	1969	1970	1973	1977	1978	1979	1960-69	1970-79
All products ^{b/} :									
- world-wide	5 310	10 980	12 310	20 360	47 762	44 057	66 576	8.40	20.63
- to developing countries	680	1 060	1 240	2 260	6 599	5 932	7 283	5.05	21.74
- of which to Africa	350	560	650	860	2 046	1 837	2 900	5.36	18.07
All food items ^{c/} :									
- world-wide	2 380	3 180	3 570	4 890	8 950	8 538	9 796	3.27	11.87
- to developing countries	340	395	410	610	880	919	1 256	1.68	13.46
- of which to Africa	225	230	270	330	561	563	683	0.24	10.86
Agricultural raw materials ^{d/} :									
- world-wide	1 270	1 250	1 420	2 080	2 385	2 190	2 987	-0.17	8.61
- to developing countries	150	155	180	260	255	225	431	0.36	10.19
- of which to Africa	23	38	46	55	73	66	180	5.74	16.37
Fuels ^{e/} :									
- world-wide	245	3 410	4 060	8 900	30 794	27 464	45 496	34.00	30.80
- to developing countries	14	205	305	910	4 436	3 747	3 945	34.74	32.90
- of which to Africa	10	87	96	235	678	490	934	27.17	28.76
Ores and metals ^{f/} :									
- world-wide	1 058	2 289	2 391	3 021	3 502	3 488	4 181	8.95	6.40
- to developing countries	57	71	96	203	522	504	308	2.47	13.83
- of which to Africa	7	23	37	52	379	366	129	14.13	14.38
Manufactured goods ^{g/} :									
- world-wide	328	810	843	1 389	1 961	2 211	3 998	10.56	18.88
- to developing countries	96	228	246	271	474	508	1 330	10.09	20.62
- of which to Africa	61	180	203	183	330	325	964	12.77	18.90

Source: UNCTAD Handbook of International Trade and Development Statistics, several issues.

Notes: a/ The term "developing countries" is used here to include non-self-governing territories.

b/ SITC (0 to 9).

c/ SITC (0 + 1 + 22 + 41).

d/ SITC (2 - 22 - 27 - 38).

e/ SITC (3).

f/ SITC (27 + 28 + 67 + 68).

g/ SITC (5 to 8 - 67 - 68).

Table 4
Exports from developing countries of Asia a/

	Million United States dollars							Average annual rate of growth per cent	
	1960	1969	1970	1973	1977	1978	1979	1960-69	1970-79
All products ^{b/} :									
- world-wide	11 910	22 090	24 760	58 330	178 369	190 421	262 815	7.10	30.31
- to developing countries	3 560	5 630	6 260	14 000	46 846	51 544	72 985	5.22	31.37
- of which to Asia	2 905	4 570	4 955	10 940	33 202	38 847	54 847	5.16	30.62
All food items ^{c/} :									
- world-wide	2 500	3 330	3 660	6,450	14 430	15 202	18 561	3.23	19.77
- to developing countries	927	1 145	1 210	1 925	4 894	5 499	9 595	2.37	25.87
- of which to Asia	745	1 033	1 072	1 756	4 279	4 742	6 158	3.70	21.44
Agricultural raw materials ^{d/} :									
- world-wide	2 775	3 000	2 925	6 570	7 880	9 279	13 746	0.87	18.76
- to developing countries	618	655	629	1 800	2 564	2 961	4 230	0.64	23.58
- of which to Asia	542	557	531	1 594	2 271	2 640	3 765	0.30	24.31
Fuels ^{e/} :									
- world-wide	4 180	8 760	9 890	26 160	113 278	111 208	159 701	8.57	36.22
- to developing countries	1 025	1 715	1 990	5 340	25 787	25 749	35 686	5.88	27.81
- of which to Asia	784	1 296	1 462	3 484	15 515	17 055	25 461	5.74	37.36
Ores and metals ^{f/} :									
- world-wide	610	1 261	1 523	2 346	4 179	5 273	6 743	8.40	17.97
- to developing countries	99	241	296	566	1 053	1 528	2 294	11.70	25.55
- of which to Asia	77	211	267	509	952	1 419	2 146	11.85	26.05
Manufactured goods ^{g/} :									
- world-wide	1 815	5 514	6 571	16 500	37 708	48 350	62 309	13.14	28.39
- to developing countries	853	1 818	2 101	4 285	12 290	15 599	20 534	8.77	28.82
- of which to Asia	643	1 448	1 583	3 509	9 962	12 695	16 903	9.44	30.10

Source: UNCTAD Handbook of International Trade and Development Statistics, several issues.

Notes:

- a/ The term "developing countries" is used here to include non-self-governing territories.
 b/ SITC (0 to 9).
 c/ SITC (0 to 22 + 4).
 d/ SITC (0 to 22 + 27 - 28).
 e/ SITC (3).
 f/ SITC (27 + 28 + 67 + 68).
 g/ SITC (5 to 8 - 67 - 68).

Table 5

Destination of exports from developing countries a/
(per cent of total exports)

	Developed market-economy countries	Socialist countries	Developing countries
1955	72.0	2.1	24.9
1960	74.4	3.3	20.8
1970	72.2	6.9	18.9
1977	70.7	3.6	23.8
1978	70.6	3.8	24.4
1979	71.1	3.2	24.6

Source: UNCTAD Handbook of International Trade and Development Statistics, several issues.

Note: a/ The term "developing countries" is used here to include non-self-governing territories.

Table 6
Exports of manufactured goods suitable for coverage by medium- and long-term credits, a/
selected developing countries

Exporting country	Total value ^{a/} (US \$ million)	Direction of trade (in per cent)						
		Developed market-economy countries	Socialist countries	Total	Developing countries			
					Africa	America	Asia	Oceania
Argentina	570.1	22.9	-	77.1	0.9	75.3	0.9	-
Brazil	2,616.6	38.1	0.1	61.8	9.8	44.7	7.0	0.2
Chile	40.5	9.4	-	90.6	-	83.1	7.5	-
Colombia	125.8	9.2	4.1	86.7	0.2	86.2	0.3	-
Costa Rica	40.3	11.2	-	88.8	-	88.7	0.1	-
Cyprus	37.6	21.1	-	78.9	15.2	-	63.7	-
Egypt	2.2	1.4	0.3	98.3	14.0	-	84.2	-
El Salvador	14.4	88.8	0.6	10.6	4.2	1.4	4.2	0.2
Guatemala	41.7	1.4	-	98.6	-	98.6	12.4	0.2
Hong Kong	1,979.1	79.5	1.4	79.6	24.8	0.5	51.3	-
India	615.1	18.9	1.5	81.1	-	0.5	54.7	-
Indonesia	124.8	36.1	7.8	56.1	1.2	6.9	-	-
Iran	53.8	31.5	-	68.5	61.0	-	-	-
Ivory Coast	66.3	11.2	-	98.8	97.9	-	0.9	-
Kenya	369.5	4.8	-	95.2	3.1	-	91.9	-
Kuwait	47.4	52.8	8.2	39.1	34.0	1.9	3.2	-
Malta	833.3	68.6	-	31.4	0.4	0.1	30.7	0.2
Malaysia	721.2	66.7	0.1	33.2	0.1	31.6	1.4	-
Mexico	11.2	71.4	-	28.6	20.7	-	7.9	-
Morocco	63.9	45.1	-	54.8	0.8	2.2	51.8	-
Pakistan	35.7	7.0	-	93.0	-	93.0	-	-
Peru	119.3	69.5	0.1	30.4	1.4	0.6	26.8	1.5
Philippines	3,506.8	68.8	-	31.2	7.6	3.6	20.0	-
Rep. of Korea	8.3	56.3	-	43.7	43.4	0.1	-	-
Senegal	3,990.7	22.7	1.6	46.7	2.3	2.5	41.6	0.2
Singapore	229.2	29.7	0.3	70.4	0.2	0.2	70.2	-
Thailand	49.8	67.5	-	32.7	32.3	0.2	0.2	-
Tunisia	62.3	21.3	0.1	78.6	15.6	0.1	62.9	-
Turkey	46.4	9.9	-	90.1	-	90.1	-	-
Uruguay	27.9	56.8	-	43.2	-	43.2	12.4	0.1
Venezuela	2,191.8	38.5	29.1	32.4	19.0	0.9	-	-
Yugoslavia			0.4	63.1	7.0	5.4	50.6	-
Others ^{c/}	335.2	36.6						

Source: UNCTAD secretariat, based on data provided by the Statistical Office of the United Nations.

a/ Estimates based on lists of goods provided by certain exporting developing countries.

b/ Where available, 1979 trade data have been used. The exceptions are:

- Barbados, Chile, India, Kuwait, Malaysia and Mexico (1978)

- Iran and Peru (1977)

- Lebanon (1973)

c/ Algeria, Bahrain, Barbados, Jordan, Lebanon, Trinidad and Tobago.

ANNEX

OPERATIONAL FEATURES OF AN INTERNATIONAL EXPORT
CREDIT GUARANTEE FACILITYA. Possible operational characteristics ^{a/}

1. The ability of developing countries to extend medium and long-term export credits on terms competitive with those offered by developed countries is limited by a foreign exchange constraint, which makes any postponement of foreign exchange earning a heavy burden for the economy.

2. In view of the difficulties facing developing countries and in order to contribute to the development of non-traditional exports of developing countries, it has been proposed that an International Export Credit Guarantee Facility be established, which would provide its guarantee to export credit paper, arising from exports on credit by developing countries. This guarantee would permit these countries to rediscount their export credit paper on favourable terms in international capital markets.

3. The Facility would guarantee export credit paper, that is promissory notes, bills and similar negotiable instruments of payment arising from exports on credit of developing countries, so as to improve the marketability of such paper on international capital markets.

4. The process of providing a guarantee might be as follows. The holder of export credit paper would present it to the national agency which, upon providing it with its own guarantee, would present it for guarantee by the Facility. Either the national agency, the exporter or the exporter's bank of the exporting country would then rediscount on favourable terms its guaranteed paper in international capital markets. On the date of maturity, the holder of the guaranteed paper would present it to the importer for payment. If this paper were not honoured by the drawee or acceptor, the holder would seek payment from the Facility. Along with or immediately after payment, the Facility would have recourse to the exporting country to recover the funds which had been disbursed against its paper.

5. In order for the Facility to enjoy the highest degree of acceptability in international capital markets, the Facility should be

^{a/} This note summarizes the main features of a proposal explained fully in TD/B/AC/33/2, which bears the same title as this annex.

funded with an appropriate capital base, which should include the participation of developed countries as well as of the World Bank Group and other international and regional financial institutions.

6. The capital structure of the Facility should be so devised as to provide, along with lines of credit from banks and the income that the Facility would obtain from fees and charges, the necessary financial means for its operations during its early years. In addition, it is suggested that the capital issued should represent some portion of the estimated average obligations of the Facility during these early years, in order to acquire the confidence of international capital markets. The ratio of issued capital to total liabilities of the Facility could, later on, be gradually reduced as the market became more familiar with the Facility. The capital issued would not need to be totally paid-in, and the size of paid-in and of callable capital would depend on the total obligations of the Facility.

7. Because the scope of its activity would be limited to the provision of guarantees and because the risk of loss in case of default by the importer would entirely rest with the exporting country, the gearing ratio of the Facility could be set at a higher level than the one usually applied for other international financial institutions, whose activities consist mainly of direct lending. Furthermore, the risk of default by all importers which would put the Facility in a difficult situation where its obligations to disburse would be greater than the size of its total capital and reserves, is unlikely to occur. The reasons are that on the one hand, the guaranteed export credit paper would be drawn on importers from various countries in the world, and on the other hand, when setting limits the Facility would make an assessment of the risk. Thus, it is suggested, as an order of magnitude, that total subscribed capital of the Facility might in the early years be of an amount equal to about one-fifth of its total obligations. The paid-in capital might be roughly one-fifth of the issued capital. Total paid-in and callable capital might later on be increased by a decision of the Governing Council of the Facility in accordance with the increase in the Facility's obligations.

8. In 1979 the UNCTAD secretariat estimated that the annual average export credits of developing countries which might be eligible for guarantee by the Facility would amount to US \$ 8.4 billion. b/ Assuming

b/ See "Export credit guarantee facility: a summary of principal issues" (TD/B/C.3/164), paras.15-16. This figure is derived from data relating to the period 1970-1977 and therefore tends to underestimate the volume of export credits which might be eligible for guarantee. The UNCTAD secretariat has subsequently requested several developing countries to provide data concerning, inter alia, the volume of export transactions and of export credits of medium and long term. In the light of their replies, revised estimates will be provided.

that, for the early years, the Facility's obligations were maintained at a modest level and, therefore, it would accept to guarantee only half of the amount of eligible credits, i.e. about US \$ 4 billion a year, the outstanding value of the paper it guaranteed might rise to as much as US \$ 12 billion after three years of operation, depending on the term of credits guaranteed. Assuming further that governments would wish to ensure the operation of the Facility for at least three years without revision of its operational procedures, capital base or gearing ratio, the subscribed capital would need to amount to US \$ 2.4 billion and the paid-in capital to about US \$ 500 million. If the capital subscriptions were phased over this three-year period, US \$ 800 million would need to be subscribed and US \$ 160 million paid in for the first year of operation.

B. Conclusions of the Intergovernmental Group of Experts on an International Export Credit Guarantee Facility c/

"5. In the light of the mandate given to it by the Committee on Invisibles and Financing related to Trade in decision 17 (IX), the Intergovernmental Group of Experts considered in detail the possible operational features of a proposed Export Credit Guarantee Facility. It was generally felt that the following would be some of the important operational features of a proposed Export Credit Guarantee Facility:

- "(a) The Facility's function would be to guarantee negotiable export credit paper arising from exports on credit of developing countries members of the Facility;
- "(b) The Facility should cover products and related services normally requiring medium- to long-term export credit in international trade. Consideration should be given to the inclusion of maturities of six months and over;
- "(c) Transactions presented for guarantee by the Facility should conform to accepted international norms and guidelines, including the OECD consensus and the Berne Union guidelines;
- "(d) The Facility may, at an appropriate stage in its activities, provide technical assistance to developing countries on matters concerning trade financing. This activity could be financed primarily by ad hoc contributions;
- "(e) The guarantee by the Facility should represent its unconditional obligation to pay immediately the holder of the guaranteed paper the amount due if the drawee or the acceptor has not honoured the paper on presentation by the

c/ The Group met in Geneva from 11 to 22 January 1982; their report is contained in document TD/B/889-TD/B/AC.33/3, paras. 5 and 6 of which are reproduced below.

holder upon maturity. The national agency of the exporting country should unconditionally guarantee to reimburse the Facility on recourse (see paragraph (h) below);

- "(f) The evaluation of the creditworthiness of individual transactions should be undertaken both by the national agency and by the Facility. The Facility should have a wide variety of information at its disposal, possibly including that exchanged in the Berne Union. The Facility should also undertake evaluation of the importing and exporting countries' creditworthiness;
- "(g) The Facility may impose limits by exporting or importing country, by exporter, importer or financing bank, by transaction or by export credit paper or on any other basis that may be called for by the sound economic management of its resources;
- "(h) Each developing country member of the Facility should designate an agency acceptable to the Facility to deal with the Facility in its operations. An agency should also be empowered to commit its government with respect to all financial obligations to the Facility;
- "(i) Whenever possible, the national agency should be the national export credit insurance organization in the exporting country. In any case, the national agency dealing with the Facility should undertake examination and evaluation of relevant aspects of transactions in a manner satisfactory to the Facility;
- "(j) The Facility should have an adequate capital base. Because of the nature of the Facility, outstanding liabilities could be a multiple of subscribed capital. The relationship between the Facility's paid-in and callable capital and between its liabilities and total subscribed capital and reserves should be such as to enhance its standing in international capital markets. Capital and other contributions to the Facility should be in freely convertible currencies;
- "(k) The Facility should be empowered to borrow short-term funds in order to meet its needs for bridging finance;
- "(l) The Facility's income should be derived from the fees associated with the provision of its guarantees and income from its investments. The basis for charging fees and the structure of such fees should reflect the requirement that the Facility should reach the self-financing stage as quickly as possible;
- "(m) The currency in which the Facility would accept obligations under its guarantee would generally be the currency in which the export credit paper was denominated. In other instances the guarantee of the national agency should protect the Facility from losses resulting from changes in exchange rates;

"(n) Income in excess of operating costs should be initially used to build up reserves. After adequate reserves have been accumulated, net income could be distributed as dividends or used for any other purpose decided by the shareholders;

"(o) While the users of the Facility would be developing countries, membership in the Facility should be as broad as possible. The participation of intergovernmental financial institutions would strengthen the Facility's standing in international capital markets.

"6. The experts discussed other issues related to the establishment of an Export Credit Guarantee Facility, which in particular required further study of, inter alia:

"(a) The possible establishment of objective technical criteria for eligibility for access to the proposed Facility, in accordance with the provisions of paragraph 5(g) above;

"(b) The precise implication of Berne Union, OECD Rules, etc. for possible beneficiaries, taking into account the provisions of paragraph 5(c) above;

"(c) The analysis of administrative and financial feasibility of the proposed Facility, taking into account the need to maximize the developmental impact."

COMPENSATORY FINANCING FACILITY: A REVIEW OF ITS OPERATION AND PROPOSALS FOR IMPROVEMENT

Dr. Stephany Griffith-Jones*

I. Introduction

Considerable attention has been given for many years by the international community to the problems arising from the instability of export earnings, especially those encountered by developing countries heavily dependent on the export of a few commodities with unstable prices. One of the mechanisms introduced by the international community to reduce fluctuations in the export earnings of developing countries, or, at least, to mitigate their adverse impact on the development process, was the establishment in 1963 by the International Monetary Fund of the Compensatory Financing Facility. ^{1/} As the International Monetary Fund points out ^{2/}: "The financing of deficits arising out of export shortfalls, notably those of primary exporting countries, has always been regarded as a legitimate use of Fund resources, which have been drawn on frequently for this purpose." In a special IMF Pamphlet on the Compensatory Financing Facility, Louis Goreux ^{3/} clearly spells out the Facility's main purpose: "Ideally, the facility should enable a member to borrow when its export earnings and financial reserves are low and to repay when they are high, so that its import capacity is unaffected by fluctuations in export earnings caused by external events."

The Compensatory Financing Facility became in the seventies a major facility for providing payments assistance to member countries, especially the developing ones. The participation of the CFF in total use of Fund credit by developing countries has however declined somewhat from its peak of 44.7 per cent in the January 1976 - July 1979 period to 27.8 per cent in the August 1979 - May 1982 period. ^{4/}

As is increasingly recognized, a very important proportion of the large balance-of-payments deficits of developing countries are currently attributable to circumstances beyond their control. Of great significance within these external factors is the recent dramatic decline (in real and since 1981 even in nominal terms) of international prices of primary commodities. As has been widely noted, in the first quarter of 1982, the overall index of primary commodity prices deflated by the U.N. index of prices of manufactured exports reached its very lowest level for the last twenty-five years. ^{5/} While stagnation or low growth remain the dominant feature in industrial countries, the prospects for growth in the value of developing countries' exports remain

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rather gloomy. It therefore seems timely to review the functioning of the Compensatory Financing Facility in recent years and to evaluate whether it has contributed sufficiently to the objective outlined above, of "sustaining import capacity in circumstances where exports are fluctuating due to circumstances outside the developing countries' control." To the extent that the Compensatory Financing Facility has not contributed sufficiently in the recent past to stabilize import capacity (or may not do so sufficiently in the near future) modifications will be suggested to improve and/or broaden its operation.

Before analyzing the CFF, it seems useful to point out the implicit assumptions on which its design was based. The CFF was designed in the early sixties assuming correctly that the value of developing countries' exports fluctuate significantly and that such fluctuations are to a great extent explained by the cyclical pattern of economic activity in industrial countries. ^{6/} A further important assumption was that these cycles of economic activity in industrial countries were short and occurred within a long-term trend of sustained growth; this latter assumption - which was basically correct in the fifties and sixties - no longer seemed to hold true in the seventies and even less in the early eighties. In particular, the current recession in the industrial countries has been very protracted; and furthermore, hopes for a sustained recovery are constantly disappearing beyond the immediate horizon. As pointed out this had a very negative impact on developing countries' export earnings. In this paper we will focus on improvements within the CFF's existing mode of operation. However, if stagnation or slow growth in the industrial countries were to persist for a long period, a more fundamental review of the CFF, which would incorporate the changing pattern of growth in the world economy, may become necessary.

In the rest of the paper, we will first examine the main characteristics of the Compensatory Financing Facility, as well as its history. Secondly, we will look at the evolution of CFF lending, and its relation to countries' estimated export shortfalls; particular emphasis will be placed on the recent evolution. Finally, in the light of the previous analysis, we will examine some proposals for modifying and improving the Compensatory Financing Facility so as to increase the effectiveness in meeting its objectives. The main proposal for improvement will focus on a revision of the quota limits on drawings, such that the CFF may reflect better the needs of developing countries. Another proposal will relate to flexibility of repayment schedules, for situations when developing countries' export shortfalls persist over a relatively long period. Suggestions on more technical aspects, which mainly affect the calculation of the value of export shortfalls, will also be put forward.

II. Main features of the CFF

The Compensatory Financing Facility was established by the IMF in 1963, to provide additional assistance to member countries experiencing balance-of-payments difficulties arising from export shortfalls,

provided the latter are temporary and largely attributable to circumstances beyond the member's control. The amount a country can draw under this facility can exceed neither the calculated shortfall (net of adjustments to avoid double compensation with previous drawings made under the compensatory and buffer stock financing facilities) nor the maximum limit set by its quota in the IMF.

The CFF was revised in 1966, 1975 and 1979. In 1981, it was extended to cover excesses in the cost of cereal imports. Following the 1981 decision, countries have the option either of requesting a purchase under the facility as it had been operating since August 1979, or of basing their requests on the new decisions, which integrate the compensation available for cereal import excesses with that available for export shortfalls.

(a) Quota limits

Among the main changes introduced in the revisions of the CFF has been a progressive relaxation of the quota-based limitation on CFF drawings. The limit, which amounted to 25 per cent of quota under the 1963 decision, was expanded to 50 per cent of quota under the 1966 decision, 75 per cent of quota under the 1975 decision and 100 per cent of quota under the 1979 decision. The 1979 decision also eliminated the additional constraint on drawings within a 12-month period, which were limited to 50 per cent of quota under the 1975 decision. Under the 1981 Decision No. 6860 7/, the total amount of a country's purchases outstanding may not exceed 125 per cent of quota; neither the export shortfall nor the excess in cereal imports may exceed 100 per cent of quota.

As IMF documents have pointed out 8/, the progressive relaxation of quota limitations on CFF drawings has to a large extent been offset by the rapid erosion of the ratio between IMF quotas and indicators which reflect the growth of world trade and/or balance-of-payments imbalances, (i.e. export earnings, current account deficits). IMF quotas which are expressed in nominal terms, have grown substantially less than world trade at current prices and far slower than world payments imbalances.9/ Thus, as can be seen in table 1, total IMF quotas which in 1966-68 were equivalent to 16 per cent of deficit developing countries' export earnings and 64 per cent of those countries' current account deficits were only equivalent, in 1978-81 to 6 per cent of deficit developing countries' export earnings and only 12 per cent of their current account deficits.

As can be seen in table 1, the deterioration occurring since the mid-sixties in these ratios, has been both pervasive and very large. It is particularly striking that the ratio of deficit developing countries' IMF quotas to their current account deficits was in 1978-81 less than one-fifth of the ratio in 1966-68. Although not so dramatic, the decline in the ratio of deficit developing countries' IMF quotas to their export earnings has also been very significant.

Table 1

Annual Average Ratios of Fund Quotas to Balance-of-Payments Indicators, for Deficit Developing Countries a/ b/

Period	Average Ratio of Deficit Developing Countries' IMF quotas to Current Account Deficit <u>c/</u>	Average Ratio of Deficit Developing Countries' IMF quotas to Exports <u>d/</u>
1966-68	0.64	0.16
1969-71	0.54	0.17
1972-75	0.31	0.11
1976-78	0.13	0.06
1979-81	0.12	0.06

Source: Calculations performed by UN, DIESA, based on IMF International Financial Statistics, Balance of Payments and Direction of Trade Statistics tapes.

- a/ Deficit developing countries include all developing countries, with the exception of the capital-surplus countries (Brunei, Iran, Iraq, Kuwait, Libyan Arab Jamahiriya, Qatar, Saudi Arabia, and the United Arab Emirates). This classification follows that of the United Nations World Economic Survey.
- b/ Fund quotas for each year correspond to the average of IMF quotas at the beginning and end of each year, each expressed in US dollars.
- c/ This column reflects the ratio of the sum of average IMF quotas divided by the sum of current account deficits, for all the developing countries that had current account deficits in any particular year.
- d/ This column corresponds to the ratio of the sum of average IMF quotas divided by the sum of exports, for all deficit developing countries - as defined in a/.

As a result of these trends maximum borrowing from the CFF under the 1966 decision (which introduced the 50 per cent of quota limit) was on average equal to 32 per cent of total current account payments imbalances in 1966-68. The maximum borrowing from the CFF under the 1975 decision (though increased to 75 per cent of quota limit) was equivalent to a mere 10 per cent of total current account payments imbalances in 1976-78. When the limit was increased to 100 per cent of

quota in 1979, the maximum borrowing under the CFF grew slightly to 12 per cent of total current account payments imbalances for 1979-81 (still well below the 1966-68 ratio).

We can therefore conclude that the progressive relaxation of quota limits has in fact been more than compensated for by the dramatic rise in trade flows and particularly in payments imbalances during the seventies, which grew much faster than quotas.

As we shall discuss in some more detail below, quota limits have been the main reason which have prevented countries drawing under the CFF from being fully compensated for their shortfalls; as estimated by the Fund. A relative deterioration of the ratio of quota limits to trade flows and current account imbalances (as occurred in the last decade) is therefore a cause of particular concern.

(b) Calculation of shortfalls

The maximum amount which a member can draw under the CFF depends on the amount of the shortfall in export earnings during the most recent 12-month period for which data are available. The amount of the shortfall is measured by the discrepancy between the value of export earnings in the shortfall year and the medium-term trend value of export earnings in that year; the latter is defined for the purpose of the CFF as the five-year geometric average centred on the shortfall year. Since, at the time of drawing, export earnings are not known beyond the end of the shortfall year, the calculation of the shortfall requires a forecast of export earnings for the 24-month period after the end of the shortfall year. Inevitably such forecasts are difficult and many imply an important margin of error; these are probably accentuated in the current uncertain economic environment. As Goreux ^{10/} shows, after analyzing the validity of past forecasts, forecasting errors that are relatively small in percentage terms may cause sizeable differences in the amounts purchased.

1. Coverage

The facility, which initially covered shortfalls in earnings from merchandise exports only, was extended in August 1979 to cover both merchandise and some categories of services. Since August 1979, receipts from travel and workers' remittances can be added to earnings from merchandise exports under two conditions.

First, the Fund must be satisfied that the statistics are reasonably accurate. Second, the member must opt for the inclusion or the exclusion of travel and workers' remittances when it presents its first request after the end of 1979, and the option cannot be reversed for a period of five years.

2. Calculations in nominal terms

All calculations relating to the use of the CFF are made in SDRs at current prices. There have been several suggestions (for example, by the UNCTAD secretariat 11/ and by the Brandt Commission Report) that calculations should be made in real terms, so as to reflect the real purchasing power of exports; this proposal has become of increasing relevance in recent years as prices of countries' exports and imports have changed rapidly and fluctuated widely.

The Executive Board of the Fund has considered several times the possibility of making the calculations in real terms, but has on each occasion rejected it. On the one hand, it has been argued that accurate indices of average import unit values are not available for all countries and their release is less timely than those of nominal export earnings. The UNCTAD secretariat 12/, however, has argued that timely comprehensive statistical information on import prices is in fact available in the UN system. Furthermore, an improvement of import price statistics for individual countries could be achieved with relative ease, particularly if, where necessary, countries received technical assistance from an institution such as the IMF. This could be easily arranged as it is already common practice that special efforts are made by countries - including technical assistance from the Fund staff - to update their trade statistics at the time of a CFF request.

Secondly, the IMF's decision to continue calculating shortfalls in nominal terms relies partly on the fact that the amount of the shortfall would not be modified by making calculations in real terms if the rate of inflation were constant. This argument, however, is not particularly relevant in today's world of rapidly changing inflation rates, and the Fund argues further that even if the rate of inflation fluctuates, the sum of the shortfalls calculated for a large number of consecutive years would remain about the same whether calculations were made in nominal or real terms, even though the distribution of shortfalls from year to year would be changed.

In table 2 are summarized the results of a simulation exercise carried out for the 1973-82 period, both for non-oil exporting developing countries and for the least developed countries, of export shortfalls estimated according to the IMF formula (in nominal terms) and according to a revised IMF formula (which reflects the purchasing power of exports). It is evident from this table that large differences arise not only on yearly basis, but also in the total sum for the whole period for both categories of countries. As 1973-82 was on the whole a period of rising inflation in industrial countries' exports, shortfalls were larger (and coverages smaller) if calculated according to the revised formula. There is also a very important problem of timing, clearly illustrated by the 1980-81 evolution, particularly for the category of non-oil exporting developing countries. In 1980 and 1981, nominal export prices for these countries were rising, even though more slowly than their import prices; as a result, according to the IMF formula these countries had total net export overages (excesses). However, the

Table 2

Comparison between estimated export shortfalls (-) and overages (+) calculated in real and nominal terms, in US \$ million, at 1975 prices a/

Years	All non-oil exporting developing countries b/		Least developed countries c/	
	(Nominal) d/	(Real) e/	(Nominal) d/	(Real) e/
	Present IMF formula	Revised IMF formula	Present IMF formula	Revised IMF formula
1973	4919	9750	88	185
1974	16458	2754	141	-312
1975	-4231	-11243	-315	-534
1976	-1690	311	209	333
1977	556	5410	391	567
1978	-6530	6178	-431	-226
1979	3437	3128	54	53
1980	9899	-8946	205	57
1981	1219	-2310	-42	-225
1982	-8393	1258	-90	-150
Total sum of shortfalls (-) and overages (+)	18644	6290	+210	-252

Source: UNCTAD secretariat calculations, based on UNCTAD tapes.

- a/ Shortfalls and overages have been calculated on a regional basis and then aggregated for each year.
- b/ Refers to all developing countries, except for the major oil exporters, as defined in UNCTAD, Handbook of International Trade and Development Statistics, Supplement 1981.
- c/ Refers to the least developed countries, same source as b/.
- d/ Shortfalls and overages are calculated according to present IMF formula (on a nominal basis). Once calculated and aggregated the shortfalls and overages have been deflated by the import price index of developing countries, to make different years comparable.
- e/ Shortfalls and overages are calculated according to revised IMF formula (on a real basis). Therefore, countries' shortfalls and overages reflect the purchasing power of exports.

revised formula, reflecting the real purchasing power of exports, was more correctly showing a large shortfall.

It can therefore be concluded that calculations of export shortfalls in real terms yield significantly different results than calculations in nominal terms, even for a relatively long period; furthermore, the former reflect more accurately a country's real import capacity. Finally, if calculations of shortfalls and drawings were to be based on real purchasing power of exports, the assistance would clearly be more timely, and reflect more accurately countries' needs.

3. Use of geometric average

Until the adoption of the 1979 revision, the trend value used in assessing the amount of the shortfall was calculated as an arithmetic average. The change to a geometric average was made because it was believed that the nominal value of export earnings follows more clearly a geometric curve rather than an arithmetic one. The statistical fit for a sample of 74 countries during the period 1957-78 was better with a geometric trend, especially for the relatively more developed countries.^{13/} The introduction of the geometric average in 1979 raises two important issues. The first one is technical; in the last decade (and in particular in recent years) the growth of world trade and of developing countries' exports has certainly not occurred at a geometric rate. This is particularly true for the poorest developing countries whose exports have either declined, stagnated or grown at an extremely slow rate. Therefore, if more recent figures are included (and the figures for the late fifties and sixties eliminated), an arithmetic fit might well be better than a geometric one, particularly for the poorest countries.

Table 3

Amounts and Number of Shortfalls and Excesses calculated with Arithmetic and Geometric Averages for 74 countries, 1959-76

Arithmetic Average		Geometric Average	
Shortfalls	Excesses	Shortfalls	Excesses
Amounts as per cent of export earnings			
5.10	3.17	3.91	4.01
Number of years as per cent of total			
59	41	54	46

Source: Data based on Goreux, op.cit., table 12.

Therefore, it can be concluded that the use of geometric averages to calculate shortfalls may be methodologically incorrect during periods of slow growth or stagnation of world trade; it may introduce a downward bias in the estimate of shortfalls. (As can be seen in table 3, for the period 1959-76, the shortfalls calculated by geometric average were approximately 30 per cent less than those calculated by arithmetic average.) It is interesting to note that the Fund staff in its internal 1979 Review of the CFF pointed out that replacing the arithmetic average by a geometric one would have the effect of reducing purchases; they claimed that this reduction could be approximately offset by the rise in the limit on outstanding purchases from 75 per cent to 100 per cent of the member's quota.

(c) Conditionality and need

The member does not have to present a financial programme for making a purchase under the Compensatory Financing Facility. In authorizing a purchase under the facility, the Fund must be satisfied that "the member will co-operate with the Fund in an effort to find, where required, appropriate solutions for its balance of payments difficulties". The test of co-operation is stricter when the purchase has the effect of raising outstanding purchases above 50 per cent of the member's quota, as the Fund must then be satisfied that past co-operation has been adequate. As Goreux ^{14/} points out "although the extent of the co-operation required has not been codified, satisfactory performance in the context of a financial programme supported by the Fund would be considered as evidence of past co-operation ... a financial programme in effect is not required for passing the stricter test of co-operation ... The extent of a member's co-operation with the Fund has to be reviewed on a case-by-case basis."

The fact that drawings on the CFF involve a relatively low degree of conditionality largely accounts for the high level of its use by developing countries.

Some concern has been expressed, however, by a number of developing countries regarding the somewhat higher conditionality for CFF drawings beyond 50 per cent of quota. It has been reported that countries have on occasion drawn less than their entitlement under the CFF because they did not wish to meet IMF conditions; and that the Fund has been unwilling to authorize drawings under the CFF beyond 50 per cent of quota if there was no or insufficient evidence that appropriate policies had been pursued.

It has also been reported that in some cases negotiations between member countries and the IMF for the approval of a CFF credit have been implicitly linked to a previous or simultaneous approval of a stand-by or extended arrangement, so as to provide a "complete package" of IMF finance. Such a practice could be regarded as introducing indirectly upper credit tranche conditionality into the approval of CFF credits.

The debate about the need for and nature of conditionality in the CFF goes back to the time of its establishment. ^{15/} Already then a UN Committee of Experts expressed clear preference for the granting of compensatory finance on an automatic basis. However, since 1963 the Fund has rejected automaticity in the granting of such credits, largely because it argues that it is difficult to draw a line between export shortfalls caused by circumstances beyond a member country's control and those that are not. The Fund argues further that since the First Amendment of the Fund Agreement (adopted in 1966), this rejection of automaticity for CFF has been given a legal basis since the Fund was precluded from granting automaticity for drawings other than reserve tranche purchases.

Despite this, the case for automaticity remains a strong one, mainly because the CFF provides assistance in relation to export shortfalls which are not only largely attributable to circumstances beyond the control of a member but which are also assumed to be self-reversing.

Further requirements for a CFF drawing are the existence of a balance-of-payments need, and that the shortfall must be temporary and largely attributable to circumstances beyond the control of the member. Purchases under the facility, like all other Fund purchases, are subject to the requirement of need, which is assessed on the basis of the member's balance of payments or reserve position or developments in its reserves.

The temporary character of the shortfall is reflected in the definition of the shortfall as the downward deviation from the five-year average centred on the shortfall year. Both within the IMF and outside it (see, for example, UNCTAD secretariat (1979) op.cit. above), the issue has been raised of extending the number of years over which the average is calculated, so as to smooth the impact of abnormal events or of cyclical fluctuations. The Fund staff has considered the possibility of extending the length of the reference period from five to seven or nine years, but has rejected it because it would require forecasting export earnings for one or two additional years. While one can agree that there are real difficulties in extending the forecasting period, it seems important to point out that the case for an extension of the period over which the average is calculated is strengthened by the fact that the industrial countries' business cycle (and particularly its trough) seems to be lengthening.

(d) Repayments

Repayments of compensatory drawings are "made in equal quarterly instalments during the period beginning three years and ending five years after the date of purchase unless the Fund approves a different schedule." An expectation that an earlier repurchase will be made arises normally on the basis of an improvement in the member's balance of payments and reserve position; another instance of early repurchase

may arise if due to underestimation of export earnings in the shortfall year, the country has been over-compensated. Goreux ^{16/} points out that: "In order to make a purchase under the facility, members must have simultaneously an export shortfall and a need to draw. It could be argued by analogy that members should be expected to repurchase when they have simultaneously an export excess and the ability to repay." Goreux states further that "the reason for not linking repurchase to export excess is a pragmatic one, as doing so would have required a forecast of export earnings at regular intervals (e.g. quarterly) for every country with outstanding drawings under the facility, and an agreement between the Fund and the member on such forecasts when they led to a repurchase expectation." This pragmatic reason given by Goreux is not conclusive since such calculations are already carried out to determine early repurchases, and could therefore (without much additional effort) be carried out to determine late repurchases.

Proposals have repeatedly been made that the repayment terms of the Compensatory Financing Facility should be made more flexible, so that they are linked to the borrowers' capacity to repay. This was, for example, the position taken by the UNCTAD secretariat in its 1979 document quoted above, by the Group of 77 Ministerial Meeting in Arusha in February 1979 and by the Brandt Report.

The logic of flexible repayments (linked to favourable export performance) is very clear. Unless repayments are made by a particular country only when overages (export excesses) occur, the schedule of repayments may coincide with the concurrence of future shortfalls and may therefore limit the benefits of net drawings from the facility.

In table 4, we can see clearly the difference between countries' total new purchases under the CFF and their net purchases (equivalent to the new purchases minus repurchases under the CFF, made by those countries that also made purchases during that year). Particularly since 1979 net purchases have been approximately 20 per cent below new purchases. The main reason why net purchases were significantly lower than new purchases since 1979 is linked to the fact that countries were since that year paying back the extraordinarily high drawings under CFF which occurred mainly in 1976 (see table 5). Thus, the level of net purchases was affected by a factor totally independent of the current needs of the countries, and which was determined by events occurring a few years earlier.

It should be stressed that if the period of repayment were extended only for countries which do not have export excesses, the increase in net purchases under the CFF would naturally be much smaller than if it were extended for all countries that had borrowed under the facility. The current practice of accelerating repayments when export excesses occur and countries have the ability to repay should be either maintained or even increased, thus restricting somewhat more the net growth of the CFF drawings as a result of the extension of the repayment period.

Table 4

Countries' New and Net Compensatory Financing Drawings, 1977-81

Year	New Purchases under CFF (SDR million) (1)	Repurchases under CFF a/ (SDR million) (2)	Net Purchases under CFF a/ (SDR million) (3) = (1) - (2)
1977	241	6	235
1978	578	10	568
1979	572	117	455
1980	980	198	782
1981	1243	214	1029

Source: IMF International Financial Statistics. Supplement on Fund Accounts, Supplement Series No.3, 1982.

a/ Repurchases and net purchases refer only to those countries which made new purchases during a particular year.

The extension of the period of repayment, for countries without export excesses, to a longer period (to a maximum, for example, of 4-10 years) would have a precedent in other types of already existing Fund facilities. Thus, countries drawing under the extended fund facility have to make repurchases in instalments within limits of 4 1/2 to 10 years and countries drawing under the Oil Facility, the supplementary financing facility and the policy of enlarged access have to make repurchases within the limits of 4-10 years. The difference with these existing facilities would be that longer repayments under the CFF (till a maximum of, for example, 4-10 years) would occur only in those cases where the country did not have export excesses and had a continued balance-of-payments need. The flexibility in repayments already has a precedent in current IMF practice in the CFF itself, even though it is referred only to acceleration of repayments.

The introduction of flexibility in repayment furthermore has precedents both in commercial practice (under the name of "bisque" arrangements) and in some international agreements (i.e. the Anglo-American Financial Agreement of 1946). 17/

III. Evolution of CFF lending, its relation to countries' needs

(a) Gross and net CFF lending

Since the liberalization of the CFF in December 1975, purchases under this facility have reached a peak. The most spectacular growth

Table 5

New purchases, total repurchases and total net purchases under a/
CFF, 1963-1982 (million SDRs)

	(1)	(2)	(3) = (1) - (2)
	New Purchases	Total Repurchases	Total net Purchases
1963 Decision			
1963	76	-	76
1964	-		-
1965	11		11
1966 Decision			
1966	24	16	8
1967	198	33	165
1968	68	78	-10
1969	12	37	-29
1970	2	97	-95
1971	70	70	0
1972	300	51	249
1973	114	34	70
1974	107	32	75
1975	239	51	188
1975 Decision			
1976	2308	317	1991
1977	241	198	43
1978	578	413	165
1979			
January - July 1979	279	353	-74
1979 Decision			
August - September 1979	293	290	3
1979	572	643	-71
1980	980	1039	-59
1981	1243	762	481
January 1982 - May 1982	582	199	383

Sources: IMF International Financial Statistics for 1963-1981. Data provided by the IMF for January 1981 - May 1981.

a/ Total Repurchases refers to repurchases by all countries (whether they made a new purchase during that year or not). Therefore, the resulting value is quite different from that of column (2), in table 4. Consequently, Total Net Purchases in this table is different from Net Purchases (column (3)) in table 4.

was in 1976 (see table 5). By April 1982, outstanding purchases under the CFF amounted to SDR 3.6 billion, which was about one-fourth of total purchases outstanding of SDR 14.9 billion. ^{18/} However, the share of CFF drawings in total purchases had declined somewhat from their peak of 29.7 per cent in the January 1976-July 1979 period to 26.2 per cent in the August 1979-May 1982 period; this relative decline was particularly marked for the developing countries as their drawings on the CFF fell from 44.7 per cent of total purchases in the former period to 27.8 per cent in the latter.

The figures quoted above refer - as do most of the published IMF figures - to new purchases only. An alternative indicator is the evolution of total net purchases under the CFF facility. As can be seen in table 5, total net purchases increased very substantially in 1976, as a result of increases in measured shortfalls and of the 1975 liberalization. However, subsequently - in 1979 and 1980 - total net purchases under the CFF turned negative once again. This was largely due to the impact of a high volume of repurchases, resulting mainly from the exceptionally large new purchases that had occurred in 1976.

(b) Evolution of the rate of compensation as estimated by the Fund

To assess the adequacy of the facility in meeting countries' needs is not a completely straightforward task. A first approximation (which is the one used by the Fund) is to compare new purchases under the CFF with net shortfalls as estimated by the IMF staff at the time of the request; the ratio of the former to the latter is called the rate of compensation.

On average the rate of compensation for new purchases (see column 1, table 6) during the 1976-81 period was only about 50 per cent; in other words, only half of the value of shortfalls (as estimated by the Fund) were compensated. After the 1979 and 1981 decisions, the average rate of compensation for new purchases increased somewhat; as a result, while under the 1975 Decision only 24 per cent of drawings corresponded to a 100 per cent rate of compensation, under the 1979 Decision 35 per cent of drawings involved a 100 per cent rate of compensation. However, even during the period 1979-81, in only 28 out of 56 purchases carried out (that is 50 per cent) did outstanding drawings under the CFF reach the maximum limit (as a proportion of quota) which countries could draw under the existing regulations. Out of these 28, ten of the drawings (that is 36 per cent of those drawings) were cases in which the country was receiving less than 50 per cent of the estimated shortfalls for that period. ^{19/} It is particularly serious that among these ten cases - in which the total value of drawings was seriously restricted by the maximum quota limit - six involved low-income countries (all of them in sub-Saharan Africa). ^{20/} As is well known, these countries' economic performance has been particularly severely affected by the deterioration in the international environment.

It is also noteworthy that, out of the 56 purchases made during the

Table 6Average Rate of Compensation, 1976-81 (in per cent) a/ b/

Year	New purchases <u>c/</u> (1)	Net drawings <u>d/</u> (2)
1976	40.0	n.a.
1977	42.2	41.3
1978	51.2	50.3
1979	52.1	41.4
1980	75.8	60.4
1981	50.2	41.6

Source: IMF data.

a/ Based on data for all member countries which draw during the period.

b/ The average rate of compensation is defined as total purchases during the year divided by total net export shortfalls as estimated by the Fund. The rate is a weighted average for all countries which draw in that particular year. In the case of early purchases, the data for both shortfalls and purchases are based on partly estimated data for the shortfall year. All shortfall estimates are based on forecasts for the 24-month period after the shortfall year.

c/ Refers to new purchases (corresponds to definition in column 1, table 4). This is the rate of compensation used by the IMF in its publications and internal documents.

d/ Refers to net purchases (corresponds to definition in column 3, table 4). This is the rate of compensation which we suggest measures much more accurately the extent to which countries are compensated in a particular year.

1977-81 period, another ten were by countries whose outstanding drawings under the CFF reached 50 per cent of quota - the threshold at which more stringent conditionality comes into play. Of the countries making these ten purchases, half received less than 50 per cent of their estimated shortfalls for the period. 21/ This would seem to show that the higher conditionality threshold of the CFF has a significant influence on countries' willingness to draw the full amounts to which they would otherwise be entitled.

(c) Problems in determining the rate of compensation

As already noted, there are several problems in regard to the Fund's way of determining the rate of compensation. First, even if a

country has export shortfalls during a certain year, it is still obliged to repay its CFF drawings due to shortfalls in previous years. Therefore, its net purchases under the facility are smaller than the new purchases; it is the latter which are used by the IMF (see table 6, column (1)), to calculate the rate of compensation.

In column 2 of table 6, we have calculated the rate of compensation for net purchases (where net purchases are defined as new purchases minus repurchases under the CFF, made by those countries that also made CFF purchases during that year). As can be seen in table 6, this rate of compensation (which measures much more accurately the extent to which countries are compensated in a particular year) is significantly lower than that calculated by the Fund.

Secondly, after the 1979 Decision, the method of calculating the shortfall was modified, as the trend value used was changed from an arithmetic average to a geometric one. As the latter necessarily implies that estimated shortfalls are always either lower or equal to those based on an arithmetic average, comparisons with pre-1979 rates of compensation necessarily over-estimate the increase in post-1979 rates of compensation, because of the change of denominator.

Finally, as discussed above, the Fund estimates export shortfalls in nominal terms whereas there is a strong case for estimating shortfalls in terms of the real purchasing power of exports.

(d) The CFF and developing countries' financing needs

Until now we have evaluated the performance of the CFF in a relatively isolated manner. In this section, we will turn, albeit briefly, to the broader issues of developing countries' financing needs and their link with the CFF.

As is increasingly recognized 22/, the world economy is currently in its deepest and longest recession since World War II. Furthermore, the prospects for a sustained recovery in the industrial countries continue to be dim. World recession (and particularly stagnation in industrial countries) has a major negative impact on developing countries' growth prospects; to a larger extent than in previous periods, developing countries' current account deficits are strongly conditioned by the simultaneously unfavourable evolution of factors outside their control such as a dramatic deterioration in their terms of trade, slower growth or stagnation of export volumes and an increase in the real interest rates at which they service their debts.

Such large current account deficits have been financed with increasing difficulty particularly since the beginning of the eighties, as official flows are seriously constrained by some of the major industrial countries' policies and as the commercial banks show

increasing reluctance to sustain the volume of lending to developing countries.

To the extent that external resources available to developing countries have been insufficient, growth rates have slowed down or even turned negative. ^{23/} It is of particular concern that some of the worst deterioration in economic performance (largely, though not only, resulting from external financial constraints) has occurred in some of the poorest developing countries.

During the mid and late seventies several forms of low-conditional or unconditional liquidity were provided by the Fund to developing countries. In 1975 and 1976, the Oil Facilities compensated countries for the higher prices of their oil imports; when the price of oil rose again in 1979/80, the Oil Facility approach was not revived, and therefore oil-importing developing countries were not able to draw on this low-conditional facility. The large expansion of Fund lending under stand-by and extended fund facility arrangements since 1980 has occurred, in a much greater proportion than in the mid-seventies, in the upper credit tranches; it has therefore implied high conditionality. As a result of these trends, the proportion of high conditionality lending in total Fund credit has increased dramatically since the mid-seventies; while in the mid-seventies approximately one-third of the resources provided by the Fund to member countries were made available on terms involving a high degree of conditionality, during 1980 and 1981 this share rose drastically as more than three-fourths of the Fund's financial commitments were made in support of programmes involving high conditionality. ^{24/} Finally, there has been no addition to the stock of unconditional liquidity after the last SDR allocation in 1981.

Under current arrangements, the CFF is the only major IMF low-conditional facility. Since there is widespread recognition that a large proportion of developing countries' current account deficits are currently attributable to circumstances beyond their control, it would seem reasonable to increase the proportion of Fund low-conditional lending from its present low level, so as to maintain a proper balance between low and high conditional lending. In the next section, we will concentrate on proposals for improving and expanding the CFF; these could be complementary to other mechanisms of expanding low-conditional or unconditional liquidity. In the short term, measures to improve and expand the CFF would have the advantage that they could be implemented quickly, thus promptly increasing the low-conditional finance available to developing countries.

Finally, as lending under CFF increases at times of declining exports, the facility has an important counter-cyclical role at times of recession.

IV. Suggestions for improvement

The preceding analysis makes it clear that the current mode of operation of the CFF has several important shortcomings. The main proposals for improving the CFF 25/ are the following:

1. Modification of quota limits

This is the most important respect in which modification of CFF seems called for.

As is clearly recognized by the Fund staff itself, quota limits are the main constraint preventing countries from obtaining full compensation for export shortfalls through the CFF, even though it is the aim of this facility that "import capacity is unaffected by fluctuations in export earnings caused by external events" (see Goreux, op.cit., p.3).

Since existing limits allow a rate of compensation of only about 50 per cent of estimated export shortfalls (according to IMF calculations) and less than 50 per cent if other factors are taken into account (see section II(c)) and given that there is no guarantee that IMF quotas will in future grow in line with world trade imbalances, the best method for improving CFF would be to eliminate the quota limit altogether. The fact that quota limits are unduly restrictive in the circumstances of the 1980s has already been recognized in the policy of Expanded Access whereby credit tranche drawings are permitted in amounts that are multiples of quotas. The logic of the programme of Expanded Access needs to be extended to CFF.

If the quota limit cannot be removed altogether for CFF, a second best solution would be to raise the limit significantly to, say, 250 per cent; this would imply a level such that the maximum drawing under the CFF for deficit developing countries in 1979-81 would have reached approximately the same proportion of their current account deficits as it reached in 1966-68 (calculations based on table 1). Such raising of the quota limit would therefore merely imply a recovery of CFF levels in relation to deficit developing countries' current account deficits.

2. Flexibility of repayments

As noted above, under current arrangements countries have to repay their CFF purchases within a period of 3-5 years. Repayment can be accelerated but not slowed down, according to the countries' ability to repay.

As the UNCTAD secretariat, the Group of 77 and the Brandt Report have suggested, an important improvement to the CFF would be to adjust CFF repayments in line with ability to repay.

There could be three repayment schedules. The first schedule would be applicable to countries whose exports and balance-of-payments situation improved rapidly; their payments would be accelerated, as at present. The second schedule would apply to countries where exports and the balance-of-payments situation improved gradually; their payments would remain within the 3-5 year period.

Finally, countries whose exports had not recovered (for reasons mainly outside their control) and continued to have a balance-of-payments need at the time when the repayments of a previous CFF drawing were due to begin, should have their repayment period extended.

It is suggested that to make it more consistent with current IMF lending programmes, the maximum period of repayment could be 4-10 years. This mode of operation would imply a greater degree of symmetry than the existing arrangements, as repayments would be accelerated in cases of balance-of-payments improvement and decelerated in cases of continued balance-of-payments pressure due to export shortfalls.

As noted above, an extension of the repayment period only for those countries without export excesses and with a balance-of-payments need would mean that the resulting increase in net purchases under the CFF would be much smaller than if the repayment period were extended for all countries.

3. Conditionality

Given that the CFF provides assistance in relation to export shortfalls largely attributable to circumstances beyond the control of the countries concerned, there is a strong case for making this facility unconditional. If lack of conditionality in the CFF is unacceptable to the Fund, it is at least necessary to avoid tightening conditionality in respect of drawings above 50 per cent of quota, and to maintain the low-conditional feature of CFF drawings even when such drawings are accompanied by drawings in the upper credit tranches.

4. Other suggested improvements

There are several other more technical modifications, which could be introduced into the CFF; even though they would significantly improve the operation of the facility, they would not have a very large impact on the funds involved.

The most important of these improvements would clearly be:

a. Calculation of shortfall in real terms

Strong arguments have been presented not only here but in several

other documents. Suffice it to say first that the phenomenon of significant differences in the rate of inflation of import and export prices is a relatively new one and that Fund practice should be adapted to these new circumstances. Secondly, it is important to emphasize that the explicit aim of the CFF is to sustain levels of import capacity in the face of fluctuations in export earnings caused by external events; this can be achieved only by attempting to compensate for shortfalls in the real purchasing power of countries' exports.

b. Length of the period

The length of the period used in calculating shortfalls should be reviewed to determine whether it is feasible for a longer period to be used. As pointed out above, the recent lengthening of the business cycle (and particularly of its trough) would make such an extension particularly appropriate.

c. Use of geometric average

The use of geometric averages to calculate export shortfalls may be inappropriate when world trade is either stagnant or growing slowly as at present. Furthermore, the use of the geometric average means that the calculated shortfalls are systematically lower than they would be if the arithmetic average were used.

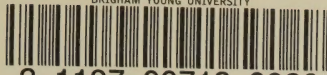
The use of the geometric average should therefore be reviewed periodically by the Fund staff to determine its appropriateness.

FOOTNOTES

1. Currently, there exist two other compensatory financing schemes: one is administered by the Arab Monetary Fund; another known as STABEX, is administered by the European Economic Community.
2. IMF Decision on Compensatory Financing of Export Fluctuations, Decision No. 6224 - (79/135) adopted 2 August 1979.
3. Louis M. Goreux, Compensatory Financing Facility, Pamphlet series no. 34, IMF, Washington D.C., 1980, p.3.
4. Source: IMF data. The latter figure includes drawings under the cereal facility. Use of Fund Credit (both total and in the CFF) refers here only to New Purchases and therefore is different to the concept of Net Use of Fund Credit used below, which refers to Purchases minus Repurchases.
5. See, for example, UNCTAD, Trade and Development Report 1982, Chapter 1 and IMF Survey, 5 April 1982.
6. M. Goldstein and M.S. Khan in "Effects of Slowdown in Industrial Countries on Growth in Non-Oil Developing Countries". IMF Occasional Paper 12, Washington D.C., August 1982 provides a recent review of the evidence in this area. This, as well as other studies, show that both the terms of trade and export volumes of developing countries are closely connected with economic activity in the industrial countries; in fact, according to the estimates provided by them, the elasticity of non-oil exporting countries' exports volume with respect to industrial countries' real GNP has increased over the past 20 to 30 years.
7. IMF Decision No. 6860 - (81/81) May 13, 1981.
8. See, for example, Goreux, op.cit. in 3.
9. Increased world inflation during the seventies naturally contributed to a more rapid erosion of quota's real value as they are expressed in nominal terms.
10. Op.cit. above.
11. See, in particular, UNCTAD secretariat, Trade and Development Board, International Monetary Issues. Compensatory Financing for Export Fluctuations. Note by the UNCTAD secretariat, TD/B/C.3/152/Rev.1, 9 April 1979. More recently, a similar proposal was put forward by Williamson, John in The lending policies of the International Monetary Fund. Institute for International Economics, August 1982. Washington D.C.
12. See UNCTAD secretariat, op.cit. in 11.
13. See, Goreux, op.cit., for calculations and discussion.
14. Op.cit. above.

15. For the original Fund position, see IMF Automatism and the Use of Fund Resources, Part III of Report on Compensatory Financing of Export Fluctuations, Washington D.C., February 1963.
16. Op.cit. above.
17. For more details, see C. Harvey, On Reducing the Risk in Foreign Exchange - For Both Parties. IDS Discussion Paper 167. For a further discussion of related issues, see G.K. Helleiner "Relief and reform in the third world debt", World Development, Vol.7, no.2, February 1979, p.119.
18. See, IMF 1982 Annual Report.
19. Based on data provided by the IMF.
20. A low-income country is defined here as one where GNP per capita was US \$ 370 or less in 1979. Based on 1981 World Bank, World Development Report definition. These countries also all belong to the category of most seriously affected countries, as defined by UNCTAD (see Handbook of International Trade and Development Statistics, Supplement 1980).
21. Based on data provided by the IMF.
22. See recently published 1982 Annual Reports of the four major international institutions dealing with finance and trade: IMF, World Bank, UNCTAD and BIS.
23. For a clear presentation of this link during the seventies, see S. Dell and R. Lawrence. The Balance of Payments Adjustment Process in Developing Countries 1980, New York, Pergamon Press.
24. See IMF World Economic Outlook, Washington D.C., 1982.
25. In recent years there have been proposals for establishing a separate complementary financing facility. In this paper we focus on suggestions for improvements of the CFF.

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